Exposing the Moving Image: the Cinematic Medium across World Fairs, Art Museums, and Cultural Exhibitions

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Exposing the Moving Image

The Cinematic Medium Across World Fairs, Art Museums, and Cultural Exhibitions

A cura di/edited by
Diego Cavallotti
Simone Dotto
Andrea Mariani

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sommario/*contents*

Exposing the Moving Image:
The Cinematic Medium Across World Fairs,
Art Museums, and Cultural Exhibitions 15
Diego Cavallotti, Simone Dotto, Andrea Mariani

1. Expos and Universal Fairs in
Cinema History and Historiography 21

Performing Innovation: Exhibiting Media
as Novelty and Spectacle at World Fairs 1893-1904 23
Frank Kessler, Sabine Lenk

Nature vivante et mécanisme artificiel :
archéologie d'un mouvement à l'aquarium
de l'Expositions universelle de 1867 33
Guillaume Le Gall

The Electricity Fairy, Loïe Fuller's Serpentine
Dance and Cinematic Display in Paris 1900 45
Éline Grignard

Moving Image – Moving Nation: Exhibiting Italy
at the International Cinematographic Contest of
Turin 1911 World's Fair 53
Agnese Ghezzi

Spain as National Dreamscape:
The Interplay of Dioramas and Moving Images in
the 1929 Barcelona International Exposition 63
Albert Elduque, Manuel Garin

Watching Films Scientifically: Traces of Cinema at
the Museo Nazionale della Scienza e della Tecnica
"Leonardo Da Vinci" in Milan 77
Simona Casonato, Elena Canadelli

Abstract Moving Images and Expanded
Architectures. The 1958 World's Fair in Brussels
and the Philips Pavilion 95
Marie Rebecchi

Montréal's Expo 67 Within an Expanding
Cinema History 101
Malte Hagener

The Space Frame and the Architectural Screens in
Displacement: Inside Montréal's Expo 67 from the
Past Until Today 111
Benjamin Léon

Projective Monuments: Moving Images,
Architecture and World Fairs 119
Trond Lundemo

Introduction: Glorious and Permanent Bazaar 125
Marion Polirsztok, Amandine D'Azevedo,
Térésa Faucon

« L'Amérique à venir sous forme d'utopie » :
Vachel Lindsay, D.W. Griffith et l'Exposition
Internationale Panama-Pacific (1915) 127
Marion Polirsztok

C'est le bazar ! Une autre histoire d'exposition
des images indiennes et anglaises 137
Amandine D'Azevedo

Exposition des non-alignés 147
Térésa Faucon

2. Exposing Bodies and Nature.
Anthropologies, Phantasmagories
and Archaeologies of the Viewing Dispositive 155

Anthropologies 157

From Screens as Prostheses of Our Body
to Our Body as a Quasi-Prosthesis of the Screens? 159
Mauro Carbone

Wearing the Image in Motion:
Tattoos as Cinema Archaeology? 167
Barbara Grespi

External Perception, Internal Projection.
A Skin Eye Disconnection 175
Simona Pezzano

Reversible Skins and Internal Images:
Visibility Issues 183
Sara Damiani

Fiction de dispositif. Notre ethnographie :
La Jetée *(Chris Marker, 1962) et le diorama* 191
Barbara Le Maître

Phantasmagories 199

Hic falsum index veri. *Le cinéma, la fantasmagorie,*
l'exposition du vrai et du faux (en histoire) 201
Édouard Arnoldy

Établir des continuités critiques : Paris 1900, le corps en mouvement et le voyage immobile 209
Sonny Walbrou

Histoire exposée, bonheur de l'humanité. De quelques fantasmagories photo-cinématographiques 221
Matthieu Péchenet

Impatience *(1928) de Charles Dekeukeleire. Construction et circulation d'un mythe historique* 231
Mathilde Lejeune

Archaeologies 239

A Screen at the Bottom of the Sea: Public Aquariums in the 19th Century 241
Massimiliano Gaudiosi

Marcel Griaule and the Dogon: Masks and Cinema as Twinned Technologies of Mediation in the Musée de l'Homme 249
Sophie Hopmeier

3. The Cinematic Museums: Art, Science and Cultural Heritage on Screen 257

The Exhibition Space as Cinematic Space: Film as Museum Object 259
Andrea Haller, Stephanie Plappert

Le Cinéma dans trois expositions patrimoniales françaises 269
François Amy de la Bretèque

Exposed Auto-Mobility: Self-Driving Cars on Stage 277
Sonia Campanini

La Ville comme espace d'exposition : notes sur le cinéma exposé et l'architecture 285
Francesco Federici

Creating Entangled Histories of Museum Collections: Isaac Julien's Vagabondia *(2002) and Camille Henrot's* Grosse Fatigue *(2013)* 293
Miriam De Rosa, Catherine Fowler

Exhibiting the Disobedience Archive*: Video, Activism and Art* 301
Vincenzo Estremo

Alternative Screens in Western Avant-Garde Cinematic Practices – A Media Archaeological Approach 311
Lei Feng

4. Exhibiting Film History Today 319

Technès 321

Introduction : TECHNÈS 323
André Gaudreault, Gilles Mouëllic, Laurent Le Forestier

Visualiser une base de données à travers une carte ? Propositions pour l'exposition numérique TECHNÈS 327
Marta Boni

Comment le format «webdocumentaire» permet-il de penser le projet d'Encyclopédie numérique des techniques du cinéma ? 333
Rémy Besson

Modalités d'exposition du cinéma d'animation pour une Encyclopédie technique du cinéma en ligne: le cas de l'industrialisation du dessin animé dans les années 1910 341
Jean-Baptiste Massuet

Film History and Contemporary Exhibitions 351

Dreyer on Display: Film Director Exhibits and Historiographical Theory 353
Casper Tybjerg

From Exhibition Cinema to Addendum *Cinema: Pere Portabella's* El sopar *as a Spanish Case Study* 359
Alan Salvadó, Ivan Pintor Iranzo

The Role of New Technology in The Marketing and Distribution of Independent Films: Producing a Virtual Reality Trailer for Marie Curie: The Courage of Knowledge *(Marie Noelle, 2017)*
Frank Mannion 369

Diego Cavallotti, Simone Dotto, Andrea Mariani, Università di Udine

Exposing the Moving Image: The Cinematic Medium Across World Fairs, Art Museums, and Cultural Exhibitions

The XXV FilmForum Conference stemmed from the *History of Cinema Without Names* three-years project: in fact, by drawing on the outcomes of the project "A History of Cinema Without Names," for the XXV Edition of our International Film Studies Conference we decided to apply those epistemological and methodological tools moulded in our three-year-project to a specific object. As a "first step" in an actual and operative "History of Cinema Without Names," steered by a more applicative effort, the *Exposing the Moving Image: The Cinematic Medium Across World Fairs, Art Museums, and Cultural Exhibitions* conference has been devoted to exploring the interrelations between moving images, the cinematic medium and other arts and media as seen through global exhibiting events, such as the Large International Exhibitions, the Universal Expositions and the world fairs throughout the 19th, 20th, and 21st centuries.

The general aim has been to shed light on the meaningful interrelations between moving images, media and arts throughout modernity and postmodernity – which means encompassing the pre-cinema, cinema and post-cinema eras, with a specific focus on Universal Expositions. In fact, the Universal Expositions proved to be a crucial and privileged field of excavation and investigation on the emergence as well as on the fluctuant re-configurations of the moving images within the broad media environment of the modern era.

Historically, international exhibitions and the world fairs are places of self-reflexion, self-representation and self-promotion, but also crucial moments of identity construction for a social community, and – a major interest for our project – the arenas of the interdisciplinary exchanges and of the cultural eclecticism.[1] The interdisciplinary and faceted character is a primary feature of exhibitions in the modern era. For instance, French historian Pascal Ory discussed eight recurrent and basic functions for these events, which – according to his hypothesis – correspond to eight "functions of modernity": technological, commercial, architectural, urbanistic, artistic, propagandistic, diplomatic, and popular/playful.[2] Thus, to explore and excavate the moving image and the cinematic media inside this hugely impactful international events, it means on the one hand to problematize exhibition forms as strategies for the legitimization and institutionalization of a moving image culture,[3] on the other hand to put the cinematic medium and the moving image in relation to other cultural and industrial characters/or functions the exhibition usually activates: for instance, given the significant role international expos have been playing in representing "other" cultures and displaying ethnographic findings, world fairs and universal exhibitions could represent a major concern also for retracing the connection between the moving image, and the anthropological discourse (especially in respect to non-western visual cultures).[4] And again, *Exposing the Moving Image* provided also glimpses on how cinema has been a part of the economic cycle, configuring itself as a useful tool for commerce within the large expos and world's fair context. In this sense, this edition of the FilmForum Conference proved to push the boundaries of cinema and media history, hybridizing its tools with epistemological and methodological issues coming from various disciplines.

This effort efficaciously meets objectives the film and media studies are pursuing now, in the direction of expanding the field of excavation of its objects, and relativising the theoretical and historical accounts on the origin and identity of the cinematic medium. Theory and historiography of cinema, in fact, have increased a general preoccupation that reframed and it still reframing the identity,[5] the foundations,[6] and the "localisation" of cinema[7]: a process the digital turn exacerbated during the last decades. The inescapable negotiation that forces today's cinema to qualify its own appearance in relation to the other (new) media,[8] and its own (new) materiality (from grain to pixel), disclosed an epochal chance to redefine its historical and theoretical coordinates.[9] Thus, if today the convergence culture[10] configures contemporary cinema as an "impure" object, we have to be aware of the fact that cinema, throughout its own history, has always been "impure," taking part in events devoted to, for instance, also economy and commerce (and to what is defined now by the notion of "territorial marketing")[11]; moreover, revisiting the genealogies of the cinematic medium in the early modernity and reflecting upon its "disseminated" fruition are profitable and suitable strategies to access the present, and imagine the future, by looking in the rear view mirror.[12] In this sense, investigating how the moving images were used in the past world's fairs means also to understand how they will be/can be used in the next world's fairs.

Thus the *Exposing the Moving Image* discloses two major strategies and possible advantages for the media and cultural scholars: by granting a deep time perspective,[13] from the very beginning of the Universal Exposition experience till nowadays, it allows to stress the redundancies, recurrences and variations of the configuration of the moving image apparatuses and devices, within a general archaeology of the mobile vision, of screens, displays and technological novelties[14]; by maintaining a global scope,[15] we stress the advantages of an intertwined approach to global phenomenon in the wake of the so called "entangled history": "the move beyond comparative history and towards entangled history or *histoire croisée* implies a shift of attention towards the interconnectedness of the world we live in. While comparative approach still thinks in fairly conventional categories […] entangled history opens the focus on interaction, interdependence and complexity"[16].

While following this path, the *Exposing the Moving Image* Conference set up an international network of investigators devoted to excavating single events that took place throughout the 19th and 20th century and even into the early 21st century: each scholar had the chance to address the general topics in accordance to their specific research interests and the specific Exposition's edition. This approach elicit various possibilities: it allowed a general discussion on how the Exposition of the Moving Image and the World Fairs would obviously present some strong potential connections with the historical context in which Early Cinema took shape, not limited to the famous cinema presentation during Expo 1900 in Paris, but more generally, also encompassing the technological novelties and "mechanical marvels" to be exposed (at the crossroads between scientific interest and magical illusion) and the technical tools for screening (projecting) films; it also disclosed crucial interconnections with other media or industrial sectors in the curse of the 20th century: for instance investigating the role of the automobile industry and cinema today (as in Sonia Campanini's essay); exploring the interconnection of Architecture and moving image (see i.e. Marie Rebecchi's, Benjamin Léon's, and Trond Lundemo's essays), or to frame some key cultural, political and sociological strings attached to the way cinema was/wasn't exhibited during a specific period, as for the Barcelona's Expo in 1929 (see Albert Elduque, Manuel Garin's essay), or again to expand major historical and (geo)political/ideological issues.[17]

Moreover, a closer look at the interplay between the projected image and the spaces of exhibition lead to further reflections on the historicity of the concept of media "dispositif,"[18] as well as at some comparisons with the different kinds of exhibiting strategies displayed in other contexts, such as the 20th museum and the contemporary art gallery.[19]

While the network that animated the Conference counted on the adhesion of a rich plea of international institutions, Università degli Studi di Udine already proved a strong interest in international expositions: the Udine research group has a long tradition of studies exploring the borders, fringes and contact zones of

traditional film studies with other fields, specifically focusing on non-theatrical cinema, expanded cinema, industrial cinema, cinema and the visual arts, and the preservation and presentation of the moving image, as the past twenty-four editions of the Udine International Film Studies Conference can display. In the past, for example, the Udine group (specifically Leonardo Quaresima, Simone Venturini and Giulio Bursi) launched and developed a research/restoration project on Edgard Reitz's *VariaVision Ein Experiment für 100 Tage*, originally presented at IVA 65 (Internationale Verkehrsausstellung in 1965: the restoration project was presented at the Goethe University Frankfurt conference "Films that Work. The Circulation of Industrial Cinema" in 2015). Thus, in the wake of this tradition and interest in exhibition, exposition and the moving image, the conference presented a two-day program whose structure has been followed and respected in these proceedings. In particular, the book structure could be described in four main axes, moving from which scholars and essays have been reunite and put into a mutual dialogue according to: same cities that hosted Expos in different periods; same short periods in different nations or cities; similar technological apparatuses; similar media history concerns (i.e. the electrification of the urban space, the visual and expos); similar sociological and cultural issues (i.e. the acceleration of time in the modern era and the space of exhibition; or the scopic regimes of modernity and exhibition); same collateral industry sectors investigated (i.e. automobile industry and the moving image in the Thirties and in the Sixties; or military and war industry and mobile screens or Optical apparatuses at expos); similar ideological implication (i.e. totalitarian regimes, or democracies, exhibition policies and the visual cultures).
More specifically, the four sections of the book are articulated as follows.

Expo and Universal Fairs in Cinema History and Historiography: in this wide and comprehensive section are investigated the architectural, urbanistic and logistic relation between the modern city and the cinematic medium or the screens; specific national histories and historiographical concerns; but also "working objects" or "paracinematic" practices stemming from cultural exhibitions of cinematic artefacts and technologies, that affected specific cultural and scientific fields throughout modernity and post-modernity. Among the scholars not already mentioned before it is worth mentioning Simona Casonato and Elena Canadelli (*Watching Films Scientifically: Traces of Cinema at the Museo Nazionale della Scienza e della Tecnica "Leonardo Da Vinci" in Milan*).

Exposing Bodies and Nature. Anthropologies, Phantasmagories and Archaeologies of the Viewing Dispositive: in this section are collected essays that put the cinematic medium and the moving image in relation to other cultural and industrial functions. Stressing the way exhibition forms represent "other" cultures and display ethnographic findings, these essays show how world fairs and universal exhibitions could bear testimony of connections between the moving image and the anthropological and socio-cultural discourse. Among the scholars not already mentioned before it is worth mentioning Mauro Carbone (*From Screens as Prostheses of Our Body to Our Body as a Quasi-Prosthesis of the Screens?*), Barbara Grespi (*Wearing the Image in Motion: Tattoos as Cinema Archaeology?*), Simona Pezzano (*External Perception, Internal Projection. A Skin Eye Disconnection*), Sara Damiani (*Reversible Skins and Internal Images: Visibility Issues*), Mathilde Lejeune (Impatience *(1928) de Charles Dekeukeleire. Construction et circulation d'un mythe historique*), Massimiliano Gaudiosi (*A Screen at the Bottom of the Sea: Public Aquariums in the 19th Century*), and Sophie Hopmeier (*Marcel Griaule and the Dogon: Masks and Cinema as Twinned Technologies of Mediation in the Musée de l'Homme*).

The Cinematic Museums: Art, Science and Cultural Heritage on Screen: this section highlights how audio-visual texts (film, analog videos, digital videos, and so on) and, more broadly, the moving image work within these exhibition contexts in an inter-medial and inter-textual way – more specifically "across" and/or "outside" the "movie theatre context," and strives to understand how these images took (and still take) part in the long-lasting effort to pinpoint the coordinates of our "visual experience" from the 19th century until nowadays, alongside with cinema and visual arts. Among the scholars not already mentioned before, it is worth mentioning François Amy de la Bretèque (*Le Cinéma dans trois expositions patrimoniales françaises*), Francesco Federici

(*La Ville come espace d'exposition*), and Feng Lei (*Alternative Screens in Western Avant-Garde Cinematic Practices – A Media Archaeological Approach*).

Exhibiting Film History Today: this section problematizes the exhibition frameworks and forms as strategies for the legitimization and institutionalization of the moving image culture and renovated or novel forms of moving image historiography. Among the scholars not already mentioned before it is worth mentioning the *Technès* research group introduced by André Gaudreault: Jean-Baptiste Massuet (*Modalités d'exposition du cinéma d'animation pour une Encyclopédie technique du cinéma en ligne : le cas de l'industrialisation du dessin animé dans les années 1910*), Rémy Besson (*Comment le format « webdocumentaire » permet-il de penser le projet d'Encyclopédie numérique des techniques du cinéma ?*), and Marta Boni (*Visualiser une base de données à travers une carte ? Propositions pour l'exposition numérique TECHNÈS*). Moreover, it is worth mentioning also the *Film History and Contemporary Exhibitions* section – more specifically, Ivan Pintor's and Alan Salvadó's *From Exhibition Cinema to* Addendum *Cinema: Pere Portabella's* El sopar *as a Spanish Case Study* and Casper Tybjerg's *Dreyer on Display: Film Director Exhibits and Historiographical Theory.*

Notes

[1] Jeffrey T. Schnapp, *Modernitalia*, Peter Lang, New York 2012.

[2] Pascal Ory, Duanmu Mei, « Les Expositions universelles : un objet d'histoire 'bon à penser' », in *Relations Internationales*, vol. 164, no. 4, 2015, pp. 105-110.

[3] Malte Hagener, *Moving Forward, Looking Back: The European Avant-garde and the Invention of Film Culture, 1919-1939*, Amsterdam University Press, Amsterdam 2007, and Id. (ed.), *The Emergence of Film Culture: Knowledge Production, Institution Building and the Fate of the Avant-Garde in Europe*, Berghahn, New York 2014.

[4] Concerning these issues, also Janine Marchessault, Susan Lord (eds.), *Fluid Screens, Expanded Cinema*, University of Toronto Press Incorporated, Toronto-Buffalo-London 2007.

[5] Dudley Andrew, *What Cinema Is!*, Wiley-Blackwell, New York 2010.

[6] André Gaudreault, Philippe Marion, *La Fin du cinéma ? Un média en crise à l'ère du numérique*, Armand Colin, Paris 2013; on the foundational moments of the cinematic medium see also *infra*: Guillaume Le Gall, *Nature vivante et mécanisme artificiel : archéologie d'un mouvement à l'aquarium de l'Expositions universelle de 1867*, pp. 33-43; Matthieu Péchenet, *Histoire exposée, bonheur de l'humanité. De quelques fantasmagories photo-cinématographiques*, pp. 221-230; Edouard Arnoldy, Hic falsum index veri*. Le cinéma, la fantasmagorie, l'exposition du vrai et du faux (en histoire)*, pp. 201-208.

[7] Francesco Casetti, "The Relocation of Cinema," in *NECSUS European Journal of Media Studies*, November 22, 2012, https://necsus-ejms.org/the-relocation-of-cinema/, last visit 4 February 2019; concerning these issues see also *infra*: Sonia Campanini, *Exposed Auto-Mobility: Self-Driving Cars on Stage*, pp. 277-283; Miriam De Rosa, Catherine Fowler, *Creating Entangled Histories of Museum Collections: Isaac Julien's* Vagabondia *(2002) and Camille Henrot's* Grosse Fatigue *(2013)*, pp. 293-299.

[8] Concerning these arguments see for instance *infra*: Frank Kessler, Sabine Lenk, *Performing Innovation: Exhibiting Media as Novelty and Spectacle at World Fairs 1893-1904*, pp. 23-32; Marie Rebecchi, *Abstract Moving Images and Expanded Architectures. The 1958 World's Fair in Brussels and the Philips Pavilion*, pp. 95-100; Malte Hagener, *Montréal's Expo 67 Within an Expanding Cinema History*, pp. 101-109; Benjamin Léon, *The Space Frame and the Architectural Screens in Displacement: Inside Montréal's Expo 67 from the Past Until Today*, pp. 111-117; and Trond Lundemo, *Projective Monuments: Moving Images, Architecture and World Fairs*, pp. 119-124.

[9] On three different theoretical perspectives and implications, see *infra*: Mauro Carbone, *From Screens as Prostheses of our Body to our Body as a Quasi-Prosthesis of the Screens?*, pp. 159-166; Sonny Walbrou, *Établir des continuités critiques : Paris 1900, le corps en mouvement et le voyage immobile*, pp. 209-219; but also on a different side of the issue and for a different theoretical angle: Casper Tybjerg*, Dreyer on Display: Film Director Exhibits and Historiographical Theory*, pp. 353-357.

[10] Henry Jenkins, *Convergence Culture. Where Old and New Media Collide*, New York University Press, New York-London 2006.

[11] Concerning these mutual mediatic influences see *infra*: Frank Mannion, *The Role of New Technology in The Marketing and Distribution of Independent Films: Producing a Virtual Reality Trailer for* Marie Curie: The Courage of Knowledge *(Marie Noelle, 2017)*, pp. 369-378.

[12] While recurring to this image, we declare our intellectual dept with a vast array of contemporary and early media and cinema scholars, but specifically with Wanda Strauven: *The Cinema of Attractions Reloaded*, Amsterdam University Press, Amsterdam 2006.

[13] Siegfried Zielinski, *Deep Time of the Media*, MIT Press, Cambridge (MA) 2006.

[14] Among others, see *infra*: Andrea Haller, Stephanie Plappert, *The Exhibition Space as Cinematic Space: Film as Museum Object*, pp. 259-268.

[15] For their geographical/national specificities see *infra* Agnese Ghezzi, *Moving Image – Moving Nation: Exhibiting Italy at the International Cinematographic Contest of Turin 1911 World's Fair*, pp. 53-61; Albert Elduque, Manuel Garin, *Spain as National Dreamscape: The Interplay of Dioramas and Moving Images in the 1929 Barcelona International Exposition*, pp. 63-75.

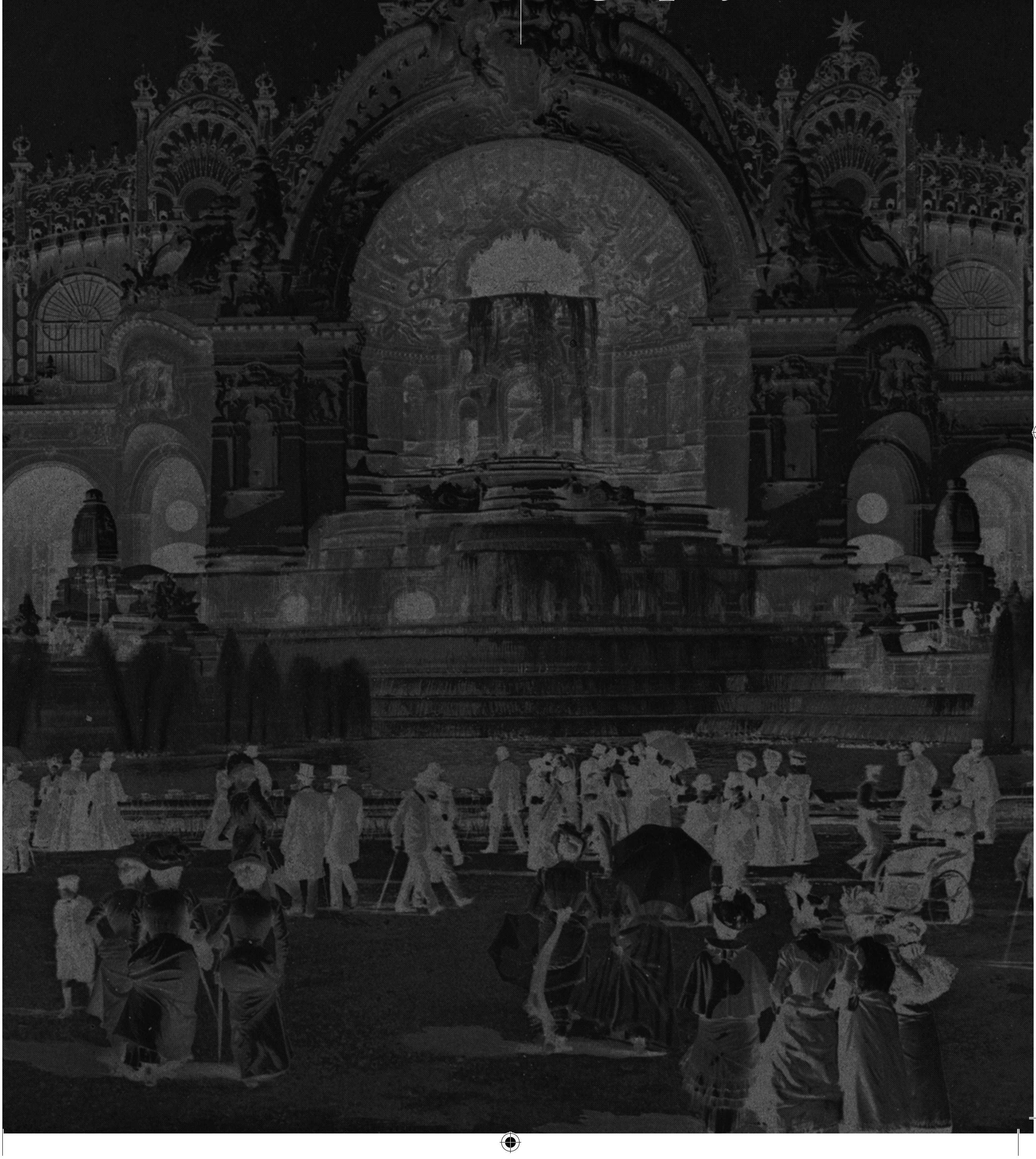
[16] From the 2014 Udine Conference proceedings Malte Hagener, *How to Write the Media History of a Single Year?*, in Alberto Beltrame, Giuseppe Fidotta, Andrea Mariani (eds.), *At the Borders of (Film) History*, Forum, Udine 2015.

[17] See *infra* Marion Polirsztok, Amandine D'Azevedo and Térésa Faucon's essay section "*Glorious and Permanent Bazaar*": Marion Polirsztok, « *L'Amerique à venir sous forme d'utopie* » : *Vachel Lindsay, D.W. Griffith et l'Exposition Internationale Panama-Pacific (1915)*, pp. 127-135;; Amandine D'Azevedo, *C'est le bazar ! Une autre histoire d'exposition des images indiennes et anglaises*, pp. 137-145; and Térésa Faucon, *Exposition des non alignés*, pp. 147-154.

[18] See *infra*: Barbara Le Maître, *Fiction de dispositif. Notre ethnographie* : La Jetée *(Chris Marker, 1962) et le diorama*, pp. 191-197.

[19] Already investigated in Alison Griffiths, *Shivers Down Your Spine: Cinema, Museums, and the Immersive View*, Columbia University Press, New York 2008 and Erica Balsom, *Exhibiting Cinema in Contemporary Art*, Amsterdam University Press, Amsterdam 2013; see also *infra*: Vincenzo Estremo, *Exhibiting the* Disobedience Archive: *Video, Activism and Art*, pp. 301-309.

Expos and Universal Fairs in Cinema History and Historiography



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Performing Innovation: Exhibiting Media as Novelty and Spectacle at World Fairs 1893-1904

April 14th, 1900: The *Exposition universelle* in Paris opened its gates to welcome about 50.9 million visitors until it closed on November 12th.[1] In one of the guide books, the organisers proudly declared:

> *The nineteenth century ended with the splendid glimmer of an apotheosis. It is Paris, it is France that has undertaken to give the supreme consecration to the progress accomplished during the course of the last hundred years […] During more than six months […] Paris and the exhibition will become for the entire universe the centre of civilisation, the synthesis of the century that has finished, the beacon of the dawn of the twentieth century.*[2]

A considerable number of visual media attractions could be found on the 550.000 square metres of the exhibition area and six additional ones situated in the centre of Paris.[3] According to Emmanuelle Toulet, the visitors could go and see four stationary and three moving panoramas, another one "making use of cinema," two "theatres including cinema" and five permanent film shows. Additionally, the Lumière company ran a "Giant Cinématographe" from mid-May onwards twice a day.[4] At least 25 dioramas have to be added to the (audio-) visual attractions plus a gigantic aquarium with the artificial ruins of a sunk Roman town, this all completed by a light, colour and sound show in the "Hall of Illusions." Almost 51 million visitors came, that is 245.000 visitors per day, while the earlier Paris exhibition of 1889 ("Grand Concours international") totalled 25 million visitors, that is 150.000 per day.[5]

This global event has subsequently been discussed by several prominent film historians as an important moment in the emergence of the new medium. Georges Sadoul, in 1947, dedicated a chapter to the event, while Jacques Deslandes and Jacques Richard in 1968 discussed at length the major cinematic inventions presented at the Universal Exposition.[6] According to Jean Mitry, audiences flocked to "all of the stands where animated pictures were shown," which indeed suggests that the Paris fair was instrumental in legitimising and popularising moving pictures.[7]

But did the Universal Exposition of 1900 really fulfil the high hopes of the organisers of the media sections? Can the event be considered a corner stone of the processes of promotion, legitimisation, and institutionalisation of new visual media technologies as "modern cultural necessities" and commodities? Did moving pictures participate in what many considered a seven-months triumph, or did they turn out a "failure" and a "humiliation," as "certain grumpy sceptics" had predicted for the Exposition as a whole?[8]

Moving images at the 1900 Exposition

"Do you like panoramas? They have been put everywhere. Not counting the special attractions […] there is hardly a section of the Exposition which does not present one or more of these trompe-l'oeil-landscapes, panoramas or dioramas […]."[9] Clearly, this form of visual displays was considered particularly appealing to general audiences, and so they were featured in many national pavilions as well as in other exhibition spaces. At the "exhibition proper"[10] on Champs-de-Mars in the Machine Gallery, the visitors could inquire about the latest scientific and technical developments of cameras, projectors and accessories and understand their contribution to the industrial progress of the finishing century. In the catalogue, cinematography appeared in Group III "Instruments et procédés généraux des lettres, des sciences et des arts" and was part of "photography" (class 12).[11] Among the French companies represented were Lumière, Pathé frères, Gaumont, Eugène Priou and Reulos, Goudeau & Cie; but also specialised companies such as Louis Encausse offering colours for films. There were also several optical lantern producers such as Molteni or Mazo, and even Étienne Jules Marey. Interestingly, except Siegmund Lubin, none of the early international cinema companies appear in this catalogue. "Cinematography" was not listed in the collective exhibition on "Mechanics and Optics," organised by Germany in the "German House" as only A. Krüß (Hamburg) and Franz Schmidt & Haensch (Berlin) promoted projection devices and sciopticons (i.e. optical lanterns), Ottomar Anschütz showed chronophotography, and AGFA (Berlin) as well as Secco-Film-Gesellschaft Dr. Hesekiel, Moh & Co. (Berlin) proposed celluloid film strips.[12]

Toulet comments that cinematography "was considered from a restricted point of view – only as a derivative of photography […] and as a technique of reproduction, nearly a form of printing,"[13] as it was situated between sections concerning typography and printing methods (class 11) on one side, and book trade, newspapers and posters (class 13) on the other.[14] This can be explained by the pre-eminent role that photo-mechanic procedures such as "heliogravure, heliography, autotype, zincography" had, as they greatly reduced costs in the printing and reproduction business.[15]

Moving images were thus present in a double role: as entertainment to amuse and instruct the general audience.[16] Some attractions were even (architectural) landmarks, such as the Maréorama, the Panorama Transatlantique, the Panorama du Tour du Monde, the Cinéorama and the sailing ship "Trois Frères" which projected films on board. On the other hand, they were presented as technological achievements in competition with others such as X-rays, and in particular as industrial product, as the professionals perceived the Exposition 1900 as a competitive trade fair, just as earlier ones (World's Columbian Exhibition 1893 in Chicago, Gewerbe-Ausstellung 1896 in Berlin, International Exposition in Brussels 1897) and later ones (St. Louis World's Fair 1904). It served as a marketing instrument to proudly present not only the latest products of the participating companies but also to measure each nation's "position on the world market" in comparison to other nations.[17] Therefore, Germany had voted for a collective presentation in the optical and fine mechanical section, instead of separate stands per company.

Moving pictures as attraction at the "Expo 1900"

Moving images of all kinds were to be found in Paris. The question is: what are potential parameters to evaluate their economic and cultural impact? How can success and/or failure of an attraction or an exhibit be measured?

A world fair is a costly enterprise for everyone participating in it. Therefore, the main efforts have to go into amortising the expenses: financially, during the event, for all commercial actors, or in terms of attention and reputation to help manufacturers to sell their product once the "parade is gone by." The national and international press has to be attracted in order to promote and praise the event. The goal has to be to surpass the earlier world fairs and set the highest standards for the ones to come. France had thus to invite other countries and also colonies to participate as well as to spur their competitiveness and wish to prove their superiority on specific fields. This, in turn, was supposed to result in investments in attractive buildings and fancy decorations, to be paid for by governments, company owners and stockholders, in order to bring visitors to Paris and sell tickets. So, for the "exhibition proper," the organisers needed large numbers of preferably highly reputed companies to fill the exhibition space and pay the considerable renting fees.

Consequently, in "class 12" professionals in the photographic field could see what the leading companies had to offer, among which Eastman Kodak, Gevaert & Cie, or Carl Zeiss. All the important German players in the field of photography were present or had sent objects,[18] the same can be said about France.[19] Many organisations and practitioners exhibited their products or their work.[20] Companies could find out what their competitors had achieved and where they were heading. They made contact to get better deals with other companies, which may also have benefitted international collaboration. At the International Photographic Congress, a big business meeting which took place from July 13th to 18th, the optical branch not only listened to lectures given by photography experts but also by the cinematographic entrepreneurs Léon Gaumont and Louis Lumière.[21] But as the fair was organised as a "peaceful competition between the nations," exhibits were arranged rather by country, and not by technology. So visitors wanting to find out about advancements in photography had to specifically look for them in different sections of the exhibition halls.

Several companies financed attractions: among others the Compagnie des Wagons-lits a moving panorama of a train trip trough Siberia from Moscow to Peking, the Compagnie des Messageries Maritimes simulated travels to Europe and Asia ("Tour du Monde"), the Société du Maréorama Hugo d'Alési the illusion of a cruise on an ocean liner. Lumière et ses fils put money into the installation of the "Phonorama" and the giant cinematograph. They all had invested and hoped to be paid back in terms of money and renown, or recognition, by winning medals and getting enthusiastic reports.[22]

Neither were guaranteed. We have not found any reliable figures concerning the number of visitors, but the revenues of various media attractions are known. The Tour of the World panorama, which used film, had the highest (691.000 francs), followed by the Maréorama (588.000 fr.), the Panorama Transsibérien (237.999 fr.),[23] the "Panorama Transatlantique" by Théophile Poilpot (109.000 fr.) and the Algerian Stéréorama (220.000 fr.). The cinematographic attractions proper earned only a fragment of this: the most successful was the Phono-Cinéma-Théâtre, combining image and sound, with 63.000 francs, followed by the "Voyages animés" (41.000 fr.), the Théâtroscope (25.000 fr.), the Lumière brothers' Phonorama (6.700 fr.) and the Cinématographe algérien (5.900 fr.).[24]

Name[25]	Kind	Company	Income (rounded)
Le Tour du Monde	Panorama with film	Compagnie des Messageries Maritimes	691.000 fr.
Maréorama	Panorama (mobile)	Société du Maréorama Hugo d'Alési	588.000 fr.
Panorama de Madagascar	Panorama (fix)		361.000 fr.
Transsibérien	Panorama (mobile)	Compagnie des Wagons-lits	237.000 fr.
Stéréorama	Panorama (mobile)		220.000 fr.
Panorama de la Mission Marchand	Panorama (fix)		137.000 fr.
Grand Guignol	Theatre with film		135.000 fr.
Roulotte	Theatre with film		122.000 fr.
Transatlantique	Panorama (mobile)	Compagnie Générale Transatlantique	109.000 fr.
Phono-Cinéma-Théâtre	Film exhibition (sound)	Paul Decauville	63.000 fr.
Sahara	Diorama		44.000 fr.
Voyages animés	Film exhibition	Duchemin travel agency, Lumière	41.000 fr.
Théâtroscope	Film exhibition (sound, colour)	Alfred Bréard	25.000 fr.
Phonorama	Film exhibition (sound, colour)	Lumière et ses fils	6.700 fr.
Cinématographe algérien	Film exhibition		5.900 fr.

Films as such were not a major attraction. The technically advanced "Phono-Cinéma-Théâtre" was praised by critics, but this did not lead to commercial success.[26] Most of the cinematographic enterprises got disappointing results and did not amortise their investments. Apparently, technical progress was not a sufficiently strong argument for a visit, while enchantment and instructive entertainment, which audiences found with the older and well-known attractions such as panoramas, were more successful. Those were mainly supported by companies wishing to promote their products by investing considerable sums in "visual delights," while, as Toulet stresses, the "financial investments" for "film exhibitions" were "considerably more moderate than [for] traditional attractions."[27]

The most attractive spectacles were thus the "old-fashioned" panoramas which charmed the audience with their painted canvas and their illusion of movement, smells, sounds, and wind. Huhtamo refers to this as the "quest for immersion."[28] According to contemporary sources, the aesthetic aspect of "moving pictures" was not important; anything that moved was accepted, regardless of the way the movement was produced. Whether photographed or painted, what counted was that the illusion of movement was "complete" and that the scenery appeared "real."[29]

"Le Tour du Monde," offering films in combination with the simulation of a trip through several countries, with live actors in the scenery, was financially very successful and drew 624.743 visitors.[30] Apparently, about 1.4 million spectators came for the gigantic screen ("Cinématographe géant," 21m x 16m) the Lumière company had erected.[31] Did the gigantism of the spectacle allow "immersion" and therefore received the audience's favour, while the small black and white images of the other "spectacles" failed to do so?[32]

Moving pictures at the "Expo 1900": No longer a "novelty"

Emmanuelle Toulet, in her study on the various presentations of cinematographic devices at the 1900 Exposition, affirms: "Initiatives, effort, spirit of invention, and reputation were concentrated on the innovation of technical processes. Attention was given to improvements, even if they were still untested."[33] This must have appealed to the professional visitors, who saw what their competitors did or intended to get on the market. They saw "the beacon of the dawn of the twentieth century." For the general audience, however, the cinematographic shows looked probably more like a "synthesis of the past century," a closed chapter of a development which had lost its attraction and was no more than old wine in new skins.[34]

On which grounds can this be argued?

1. *Photographic moving images were no longer a "technical innovation"*

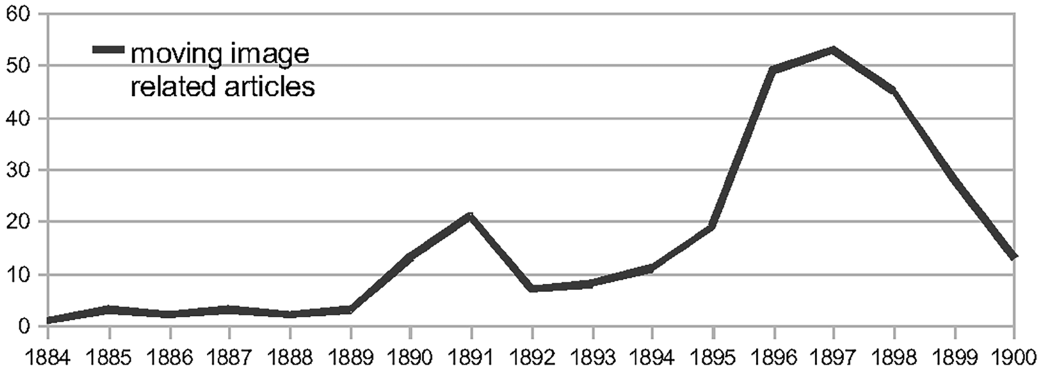
The 1900 Exposition claimed to present the "synthesis of human work" as the French president Émile Loubet stated in his opening speech.[35] It wanted to "present a complete picture of the accomplished progress in science, art and industry during the 19th century."[36] As for cinematography, in 1900, it was still a relatively recent development, but it had so-called "predecessors": chronophotographic images had been shown since 1887 (Ottomar Anschütz's Schnellseher), films since 1893 (Thomas Alva Edisons' Kinetoscope) and *projected* films since 1895 (Skladanowsky's Bioskop, Lumière's cinématographe). By 1900, "animated photography" had existed for more than a decade. They were part of the spectacular evolution of photography in the 19th century.[37]

2. *Photographed moving images were no longer "curiosity novelties"*

Numerous local studies on the first years of cinematography show that many people must have seen animated photographs at least once, as they were projected by touring showmen on fairgrounds and local venues all over France, Germany, Great Britain and other countries equipped with a modern traffic infrastructure. The inhabitants of the bigger cities could watch them even several times, in spaces such as a meeting hall in the yard of a popular restaurant or shops on busy commercial streets, later in variety theatres, casinos, cafés-concerts and other locations.[38] No later than May 1897, when the entire French and often also the international press spoke about nothing but the terrible fire of the Bazar de la Charité caused by a projector, the general public new about cinematography. That was certainly the case for those who had the money and the time to travel to Paris and visit the Exposition.

3. *Photographed moving image were no longer a "cultural topic"*
What about animated photography as a cultural topic? The late Herbert Birett's list of articles related to moving pictures allows, at least for Germany, to study how often the topic appeared in German-language periodicals other than specialised journals. The following figure shows the quantitative evolution of articles referring to animated photography.

The analysis of Herbert Birett's list shows several aspects:



1. The peak of published articles is in the year 1897, thus in 1900 moving images are no longer "news." This confirms what was stated earlier: they are definitively not a "novelty" any more.
2. When the Paris Exposition opened and cinematographic devices were exhibited, the interest for the technology had considerably diminished, articles were now focused on the various applications for moving pictures. Interestingly, this shift also occurs in 1897.
3. While chronophotography, which was considered a scientific instrument for the analysis of movement, was mentioned by the journals during the entire period, new technical developments such as micro- and high-speed cinematography or stereoscopic moving images continued to be discussed up to 1897 at least, while the "ordinary" cinematograph was no longer of interest.

To give an idea, we mention the following topics to show what the "common reader" in Germany was informed about in terms of moving pictures. Journals start in 1884-1885 with reports on Étienne-Jules Marey's scientific studies of human movements and the bi-unial magic lantern producing motion with still images. From 1886 onwards, the interest turns to chronophotography by Ottomar Anschütz and Marey as well as to the production of celluloid by Thomas Alva Edison. From 1891 to 1894 animated pictures by Edison's Kinetoscope are an additional item. In 1895 cinematography appears as a kind of improved form of photography. For the next two years, the principal constructors of cameras and projectors get their devices portrayed, however they still compete with those who had already been active in the field of "serial photography." 1897 can be considered something like a "turning point": the technical systems become much less important, other topics are introduced such as film production and film presentations by non-inventors (e.g. Philipp Wolff), accidents during movie shows or the filmic results of special forms such as micro- and high-speed cinematography. Between 1898-1900 topics concern films used outside specialised entertainment venues, the introduction of taxation for film as entertainment, safety regulations and early morality campaigns against the corrupting influence of films. By 1900, the moving pictures have seemingly conquered their position in modern society, and it is them which will stay in the focus of the press from now on.[39]

To conclude: the analysis of the non-film periodicals shows that news about scientific applications of cinematography continued to be of interest for the journalists, while explanations of technical processes and technological progress seem to have become much less attractive to them.

Could there be a relation between this constellation of the press and the half-hearted success or even total failure of most of the cinematographic shows at the Universal Exposition 1900? In any event, it is clear that the attractional force of animated photography could hardly compete with the numerous spectacular sights and sites at the 1900 Paris Exposition.[40]

1893-1904: A decade of world fairs

To what extent can our observations about the Paris exhibition be generalised for other earlier or later fairs? As to the emerging new medium of moving pictures, next to the 1900 Exposition universelle, the 1893 World's Columbian Exhibition in Chicago and the 1904 St. Louis World's Fair, could indeed be considered important landmarks, because they span the decade from the "appearance of a technological process [and] the emergence of an apparatus, through the establishment of procedures [to] the constitution of a media institution."[41] However, looking at the 1893 and 1904 fairs, we will argue that our findings concerning the 1900 Paris Exposition are largely confirmed.

At the 1893 Columbian Exhibition, there were (presumably) three devices showing animated photographs. Eadweard Muybridge gave illustrated lectures at his Zoöpraxographical or Zoopraxiscopic Hall on the Midway Plaisance, the entrance fee being 25 cents.[42] According to Lauren Rabinovitz, the enterprise was a "commercial failure," and Muybridge tried to increase his income "by selling his motion studies as souvenir engravings, plates and phenakistiscope disks mounted on handles as fans."[43] A German visitor relates that Ottomar Anschütz' "*Schnellseher*" or tachyscope was equally presented on the Midway Plaisance. There were apparently several machines, promoted as the "greatest wonder of the world," which allowed to see a moving picture for 10 cents.[44] Both Muybridge and Anschütz are mentioned in Hubert Howe Bancroft's *Book of the Fair*, who comments on the illustrated lectures on animal locomotion, asserting that "the discourses and the pictures are both entertaining and instructive."[45]

As for the third device, Edison's Kinetoscope, there is a dispute among media historians whether or not it was presented at the Columbian Exposition. Lauren Rabinovitz states that "a single peephole kinetoscope was at the Edison Manufacturing Company's phonograph exhibit at the Electricity Building."[46] Conversely, Deac Rossell is convinced that the presumed "eye witnesses" confirming the device's presence confused it with Anschütz' tachyscope and adds that Edison had announced two years earlier that he was going to present a machine "that does for the eye what the phonograph does for the ear," a statement that was widely publicised and which may have caused this error.[47] Yet, there is at least one contemporary source which unambiguously declares:

> *Here Mr. Edison shows for the first time the most recent creation of his fertile brain. This device is the supplement and complement of the phonograph. It is to the eye what the phonograph is to the ear – mechanical retina which stores away a living picture with the ability to reproduce it at any time, preserving not only every feature, but also every movement, gesture, or expression.*[48]

Follows a lengthy description of the apparatus, suggesting that it is indeed a viewing machine. It is called, however, a "kinetograph," so the question remains, what exactly was put on display in Chicago, as it is also mentioned that the "first perfected kinetoscope, which is a domestic kinetograph, was finished in the Edison laboratory at Orange, N. J., a few weeks before the opening of the Exposition."[49] Paul Spehr, in his book on William Kennedy Laurie Dickson, explains that Edison had intended to have kinetoscopes at the fair as slot machines to earn money, but that finally he was unable to deliver. This, however, does not exclude the presence of a prototype at the Electricity Building.[50] Whether this machine actually functioned, is still an open question.

In any event, the guide books and other contemporary volumes dedicated to the Columbian Exposition pay hardly any notice to Muybridge's, Anschütz' and Edison's devices. As in Paris seven years later, the buildings, whether erected by the various states within the U.S. or by foreign nations, the major technological achievements and the exotic sights dominate the discourse on the fair. So even at a point where animated photography was a novelty, the new technology did apparently not succeed in drawing much attention.

As Tom Gunning has shown, things were not different at the St. Louis World's Fair in 1904.[51] The *Book of the Fair* only mentions one cinematographic display: "The biograph and stereopticon exhibition of the Interior department exhibit in the Government building depicted scenes from Indian reservations. National parks, and forest preserves shown by lantern slides and motion pictures."[52] Cinema being on the path towards institutionalisation, there were apparently no innovations important enough to be exhibited, with one possible, but improbable exception: film historian Terry Ramsaye asserted in his 1926 *A Million and One Nights* that a Hale's Tours exhibit was presented in St. Louis, and Raymond Fielding confirmed this by referring to two eye witnesses, who had visited the display as children. However, as Gunning convincingly argues, they may have confused the Hale's Tours with the Trans-Siberian Railway panorama. Hale himself was also at the fair, but he presented a fire drill.[53] So, what seems striking here in the end, is that the moving panorama was again prominently featured at the fair, four years after its success in Paris. Apparently, it continued to attract audiences at such a scale that it warranted the investment.

Conclusion

During the decade leading towards the medium's institutionalisation, animated photography was present at three major world fairs. Its impact, however, was relatively modest. First of all, it could hardly compete with the numerous other attractions in a world fair's "attention economy." As a technological innovation and business factor it was not important enough to arouse much interest in those who were writing about the fairs. As an entertainment offered during the fairs, only the most spectacular attractions were capable of drawing the journalists' attention, and moving pictures had a hard time competing with those. Conversely, for film historians, the new medium's presence on the fair was an important issue in itself, and thus Sadoul, Mitry, or Deslandes and Richard may have been inclined to somewhat overestimate its impact. This does not mean, however, that from the viewpoint of the history of film and cinema, the fairs do not merit a more systematic exploration. The Paris 1900 Exposition did feature a number of technological innovations that help to better understand what potential entrepreneurs saw in moving pictures.[54]

Secondly, one could also ask whether the fairs were of much interest for the emerging industry of moving pictures. In 1893, Edison's kinetoscope seems to have not been ready yet to be launched on a larger scale, while Muybridge's and Anschütz' devices had been displayed already elsewhere. This was also the case for moving picture technology in 1900 and 1904, which by then was far beyond what has been termed its "novelty period." The moving picture industry was starting to take shape, production, distribution and exhibition had entered the process of institutionalisation. In a way, the Paris 1900 fair came too late to showcase moving pictures as an innovation. To quote the French writer Adolphe Démy, who in 1907 looked back at the various Paris world fairs: "Did M. Lumière wait for the 1900 Exposition to produce his *cinématographe*?"[55]

Notes

[1] See Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," in *Persistence of vision*, no. 9, 1991, p. 30, endnote 57 on p. 36.

[2] *Guide-boussole: exposition et Paris*, quoted by Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., p. 10.

[3] Louis Rousselet, *L'Exposition universelle de 1900*, Hachette et Cie, Paris 1901, pp. 7-8.

[4] Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., pp. 16, 33.

[5] Louis Rousselet, *L'Exposition universelle de 1900*, cit., p. 7.

[6] See Georges Sadoul, *Histoire générale du cinéma II: Les pionniers du cinéma 1897-1909*, De-

noël, Paris 1947, pp. 100-116; Jacques Deslandes, Jacques Richard, *Histoire comparée du cinéma 2: Du cinématographe au cinéma, 1896-1906*, Casterman, Tournai 1968, pp. 41-79.

[7] Jean Mitry, *Histoire du cinéma 1 (1895-1914)*, Éditions universitaires, Paris 1967, p. 146.

[8] Louis Rousselet, *L'Exposition universelle de 1900*, cit., p. 7.

[9] *Idem*, p. 287.

[10] *Idem*, p. 212.

[11] *Catalogue général official. Tome troisième*, Impriméries Lemercier, Paris, L. Danel, Lille s.d. [1900], Groupe III, class 12.

[12] See *Weltausstellung in Paris 1900. Amtlicher Katalog der Ausstellung des Deutschen Reichs*, Selbstverlag des Reichskommissariats, Berlin 1900, pp. 89-91, 141.

[13] Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., p. 11.

[14] See *Weltausstellung in Paris 1900*, cit., pp. 78-83.

[15] *Idem*, pp. 71, 76, 84-85.

[16] In addition, there was also an exhibition on the history of chronophotography, supervised by Marey at the *Musée centennal de la classe 12 (Photographie)*.

[17] *Weltausstellung in Paris 1900*, cit., p. 141.

[18] *Idem*, pp. 88-91.

[19] See Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., pp. 13-14.

[20] In total 83.047 exhibitors came. See Adolphe Démy, *Essai historique sur les expositions universelles de Paris*, Librairie Alphonse Picard et Fils/Librairies des Archives nationales et de la Société de l'école de Chartes, Paris 1907, pp. 643-644.

[21] See Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., p. 13.

[22] In total 45.944 awards and honourable mentions were distributed, of which more than 50% went to French enterprises (see Adolphe Démy, *Essai historique sur les expositions universelles de Paris*, cit., p. 643).

[23] See Erkki Huhtamo, *Illusions in Motion. Media Archaeology of the moving panorama and related spectacles*, MIT Press, Cambridge (MA)-London 2013, p. 314 and p. 328 footnote 106.

[24] Information provided by Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., p. 33.

[25] For the categorisation and income information, see *ibidem*.

[26] The constructor even asked the organisers of the exhibition for an indemnification of 150.000 francs (see *idem*, p. 26). The "Voyages animés" with travelogues showing French landscapes obtained a considerable rent reduction (*idem*, p. 28). Other attractions such as the Panorama Marchand (100.000 fr.), the Village Suisse (25.000 fr.) and restaurants were claiming compensations as well (see Adolphe Démy, *Essai historique sur les expositions universelles de Paris*, cit., p. 626). Similarly, the Diorama de Fachoda (costs: 250.000 fr., revenues: 4.614 fr.), the Maréorama (costs: 1.250.000 fr.), the Panorama Marchand (costs: 500.000 fr.) and the Tour de Monde (costs: 2 million fr.) (*idem*, p. 628), all lost money.

[27] Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., p. 31. These enterprises had to earn their money back quickly, while big companies could hold on for much longer.

[28] Erkki Huhtamo, *Illusions in Motion*, cit., p. 309. Louis Rousselet, *L'Exposition universelle de 1900*, cit., p. 288, mentions this effect by quoting Humboldt (probably Wilhelm) who declared that circular panoramas put the spectators in the "middle of a magic circle" and struck them by amazement while shielding them from distractions and, in this way, made them believe to be surrounded by a "foreign nature."

[29] Erkki Huhtamo, *Illusions in Motion*, cit., pp. 303-304, states that the panorama had seen a "revival development around stock companies" and that circular panoramas were in favour again since 1872.

[30] The author of the website (http://exposition-universelle-paris-1900.com/PANORAMA_TRANSATLANTIQUE) remarks: "The intention was praiseworthy, but the effect was mediocre, as the contradiction between real people and painted canvas accentuated the fiction." This may be a misunderstanding, as the "contradiction" was favourably received by contemporary critics (see Louis Rousselet, *L'Exposition universelle de 1900*, cit., pp. 288-289) – and apparently the audience, which loved the "panorama animé."

[31] See Emmanuelle Toulet, "Cinema at the Universal Exposition, Paris, 1900," cit., p. 31.

[32] Toulet also mentions the "press accounts of film showings" between 1895 and 1896 which showed "mingled admiration," but by 1900 audiences must have been familiar with this effect. *Ibidem*.

[33] *Ibidem*.

[34] Thierry Lecointe, who analysed the dissemination of cinematography in France, noted the same phenomenon in the south of France. Thierry Lecointe, "Les premières années du spectacle cinématographique à Nîmes – 1895 – 1913," in *1895*, no. 43, 2004, p. 7.

[35] Loubet quoted in Louis Rousselet, *L'Exposition universelle de 1900*, cit., p. 7.

[36] *Ibidem*.

[37] One of the reasons for the lack attention could also be that, compared to the photographic and optical business, the number of cinematographic devices present was rather small.

[38] For France there are numerous local studies, among others, by Jacques Deslandes, Jacques Richard, *Histoire comparée du cinéma*, cit.; Jean-Jacques Meusy, *Paris-Palaces ou le temps des cinémas (1894-1918)*, CNRS, Paris 1995; Thierry Lecointe, "La sonorisation des séances Lumière en 1896 et 1897," in *1895*, no. 52, 2007, pp. 28-55; Jacques and Chantal Rittaud-Hutinet, *Dictionnaire des cinématographes en France (1896-1897)*, Honoré Champion, Paris 1999; Jacques Rittaud-Huttinet, *Le Cinéma des origines, les frères Lumière et leurs opérateurs*, Champ Vallon, Seyssel 1985; Guy Olio, "Vers la sédentarisation: du cinématographe au cinéma. Les premières tentatives ambulantes et urbaines du cinématographe à Toulon (1897-1905)," in *Cahiers de la Méditerranée*, nos. 16-17, 1978, pp. 3-28; Jean-Baptiste Hennion, "Éclairage sur l'année 1896. Éléments chronologiques relatifs à l'introduction du spectacle cinématographique sur les champs foie français," in *1895*, no. 54, 2008, pp. 28-55 etc. Others are mentioned by Lecointe, "Les premières années du spectacle cinématographique à Nîmes," cit., p. 16. For Germany see Corinna Müller, *Frühe deutsche Kinematographie. Formale, wirtschaftliche und kulturelle Entwicklungen*, J.B. Metzlersche Verlagsbuchhandlung, Stuttgart-Weimar 1994; for Italy see Aldo Bernardini, *Cinema muto italiano*, vol. 1: *Ambiente, spettacoli e spettatori 1896-1904*, Editori Laterza, Bari 1980; for the UK see John Barnes' five volumes *The Beginnings of the Cinema in England 1894-1900*, University of Exeter Press, Exeter 1992-1998; for Belgium see Guido Convents, *Le cinématographe Lumière et la Belgique (1890-1896)*, in Aa. Vv., *L'Aventure du cinématographe. Actes du Congrès mondial Lumière* (Université Lumière Lyon 2, 7-10 June, 1995), Aléas, Lyon 1999, pp. 35-46; Guido Convents, "Motion picture exhibitors on Belgian fairgrounds – Unknown aspects of travelling exhibition in a European country, 1896-1914," in *Film History*, vol. 6, no. 2, 1994, pp. 238-249. This list could be continued for other European countries, and of course the U.S. and Canada.

[39] This overview only concerns Germany, so more research in other countries would be needed to allow generalisations.

[40] We have looked at the French weekly *L'Illustration*, which in 1900 reported regularly on the fair, but with one exception (a brief remark on the Stéréorama), moving image attractions were not mentioned. The journalists focused on the light effects produced by electricity, on spectacular technical achievements, and more generally on the "rue des Nations" with the buildings erected by foreign nations and those representing the colonies.

[41] André Gaudreault, Philippe Marion, "A Medium Is Always Born Twice...," in *Early Popular Visual Culture*, vol. 3, no. 1, 2005, pp. 3-15. Quote on p. 5.

[42] *Conkey's Complete Guide of the World's Columbian Exposition*, W. B. Conkey Company, Chicago 1893, p. 24. The entrance fee to the Exposition was 50 cents for an adult visitor.

[43] Lauren Rabinovitz, *For the Love of Pleasure. Women, Movies, and Culture in Turn-of-the-Century Chicago*, Rutgers University Press, New Brunswick-London 1998, pp. 48-49. *Conkey's Complete Guide*, cit., p. 24 also mentions "zoopraxiscopic fans."

[44] Hermann W. Vogel, "In Chicago," in *Photographische Mittheilungen*, vol. 30. no. 11, 1893, pp. 163-164.

[45] Hubert Howe Bancroft, *The Book of the Fair*, The Bancroft Company, Chicago-San Francisco 1893, p. 863. He adds: "Investigation in this line is a speciality which has been pursued within comparatively recent years, among the most prominent of those who have engaged in it being Ottomar Anschütz, of Lissa, Prussia, whose tachyscopes are exhibited in the Electrical building, and Eadweard Muybridge, who displays some of his results in the hall on the plaisance." Vogel's and Bancroft's statements combined suggest that Anschütz exhibited his tachyscope both as a slot-machine for entertainment and as a technological novelty. On Anschütz see also Deac Rossell, *Faszination der Bewegung. Ottomar Anschütz zwischen Photographie und Kino*, Stroemfeld/Roter Stern, Basel-Frankfurt am Main 2001, p. 101.

[46] Lauren Rabinovitz, *For the Love of Pleasure*, cit., p. 48.

[47] Deac Rossell, *Faszination der Bewegung*, cit., pp. 115-116, footnote 57.

[48] William E. Cameron, *The World's Fair, Being a Pictorial History of the Columbian Exhibition*, P. D. Farrell & Co., Grand Rapids 1893, p. 322.

[49] *Idem*, p. 323.

[50] Paul Spehr, *The Man Who Made the Movies: W. K. L. Dickson*, John Libbey, New Barnet 2008, pp. 271-275.

[51] Terry Ramsaye, *A Million and One Nights*, Simon & Schuster, New York 1926, p. 429; Raymond Fielding, *Hale's Tours: Ultrarealism in the Pre-1910 Motion Picture*, in John L. Fell (ed.), *Film Before Griffith*, University of California Press, Berkeley-Los Angeles 1983, pp. 116-130; Tom Gunning, "The World as Object Lesson: Cinema Audiences, Visual Culture, and the St. Louis World's Fair," in *Film History*, vol. 6, no. 4, 1994, pp. 422-444.

[52] Marshall Everett, *The Book of the Fair*, P. W. Ziegler & Co., Philadelphia 1904.

[53] Tom Gunning, "The World as an Object Lesson," cit., pp. 439-440.

[54] As other contributions to this volume will show, this is the case also for later fairs. World fairs, in other words, generally rather present experimental media technologies, and these, more often than not, have a hard time competing with the numerous other attractions.

[55] Adolphe Démy, *Essai historique sur les expositions universelles de Paris*, cit., p. 737.

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Nature vivante et mécanisme artificiel : archéologie d’un mouvement à l’aquarium de l’Expositions universelle de 1867

L’Exposition universelle de 1867 à Paris sera la première à intégrer l’aquarium à l’ensemble des objets, curiosités et attractions développés dans les grandes manifestations internationales de la seconde moitié du 19^e siècle. L’idée d’un aquarium fait partie du projet global et initial au point qu’il tient une place de choix dans le Jardin réservé dessiné et aménagé par Alphonse Alphand, ingénieur en charge des parcs, jardins, promenades et embellissements de Paris au sein de l’administration du baron Haussmann. Deux aquariums sont édifiés dans le Jardin, l’un d’eau de mer, l’un d’eau douce. Leur architecture de fer, de verre et de rocaille ne passe pas inaperçu et fait l’objet de nombreux commentaires. Ils se déploient sur une grande surface du Jardin, et sont à proximité, notamment, d’une grande serre et d’un diorama photographique.

Une maquette de fer et de verre enchâssée dans des roches

Ces deux aquariums participent d’un projet encyclopédique d’exposition du progrès, du savoir, mais aussi, de l’expansionnisme européen qui trouvait ses formes dans la colonisation.[1] L’ensemble du principe d’exposition de ces manifestations trouve en partie son expression dans la nouvelle architecture qui combine des nouveaux matériaux – le fer et le verre essentiellement, mais aussi le mortier – et une grande technicité au service de la monstration des objets. L’aquarium profite et bénéficie justement des nouveaux principes architecturaux ainsi que du progrès technique de la machine. Car si l’aquarium désigne une architecture globale qui abrite une scénographie originale et spécifique, il met aussi en scène l’exposition de la nature à travers un dispositif de monstration. L’ensemble du dispositif optique de l’aquarium peut aussi se voir comme une vitrine, telle qu’elle s’est développée à cette époque, tant du côté du des passages parisiens et des grands magasins que des manifestations internationales de l’industrialisation. Mais si l’aquarium est une vitrine, celle-ci est d’une grande technicité car elle doit contenir un élément exogène à son lieu d’exposition, l’élément liquide et ses habitants. Elle est aussi une boîte optique qui permet au spectateur de plonger son regard à travers un écran tout en répondant à des contraintes techniques qui lui sont propres. On n’expose pas des poissons comme on expose des objets manufacturés dans la mesure où, en plus d’être une exposition, l’aquarium est l’habitacle d’un monde subaquatique viable et contenu. Si l’aquarium est la réplique d’un milieu naturel dans laquelle l’homme ne peut pas pénétrer, alors il est le contraire même de ce que pourrait être une architecture pour l’homme. Tout au plus, l’architecture de l’aquarium peut rencontrer une projection fantasmatique et utopique de l’homme – qui contient ce qui deviendra le modèle de la maison de verre moderniste. Pour que le milieu recréé à l’aquarium soit viable, l’architecture qui l’abrite s’adjoint une machinerie qui permet à l’eau, d’une part d’être alimentée en oxygène, ce qui permet la vie aquatique et, d'autre part, d'être renouvelée et propre, ce qui permet de maintenir une transparence réelle. Depuis la position du spectateur, cette architecture propose à son regard un objet autosuffisant dont il est exclu. De ce point de vue, cette machine célibataire apparaît comme la réduction d'une architecture de verre et de fer, c'est-à-dire comme la réduction des architectures abritant les différents objets des expositions universelles, la maquette d'un Crystal Palace en quelque sorte, enchâssée dans des roches factices. Par ailleurs, si, comme dans la plupart des cas, les architectures qui abritent ces dispositifs d'exposition aquatique empruntent les mêmes caractéristiques des grandes nefs de fer et de verre, l'aquarium serait alors comme une maquette exposée dans une architecture qui offrirait le reflet de son déploiement et sa concrétisation dans l'espace de l'homme. Cette relation de l'architecture qui serait le déploiement d'une maquette qu'elle contient en son sein forme une synecdoque et entraîne une mise en abyme très fertile. L'aquarium peut être considéré dans ce cas comme un modèle des dispositifs d'exposition, une sorte de point de convergence des techniques de monstration à un moment où l'effervescence industrielle bat son plein. Pour le dire autrement, il semble que l'aquarium au 19e siècle soit une forme aboutie de l'exposition qui se situe à la croisée des progrès des spectacles illusionnistes et des formes les plus poussées des techniques de constructions industrielles (qui elles-mêmes abritent des objets exposés aux yeux du public).

Accouplement du jardinier et de l'ingénieur

L'aquarium serait ainsi une hybridation du spectacle et de l'industrie, mais aussi du spectacle et de la science. Mais les aquariums des grandes manifestations internationales offrent dans le même temps l'étrange combinaison du fer et du verre accouplés à l'exubérance des grottes, des stalagmites et des stalactites conçues avec du mortier, un peu comme si l'aquarium était le fruit de deux passions a priori inconciliables, la passion de la transparence cristalline des nouveaux édifices et le goût immodéré pour la rocaille artificielle des nouveaux espaces verts, le rejeton de l'ingénieur et du jardinier, la collusion de la technique la plus achevée avec un certain kitsch du Second Empire. Les contours de ces attractions pourtant antagonistes font de l'aquarium un objet qui contient les contradictions fertiles d'un imaginaire, un objet paradoxal et symbolique sur lequel de nombreux fantasmes se cristallisent. Pour Victor Fournel, le Jardin réservé et ses édifices marquent le « triomphe de la nature artificielle ».[2] En cela, la scénographie générale des aquariums renvoie explicitement à l'art des jardins développé par Alphand, l'architecte du Parc des Buttes-Chaumont inauguré au moment de l'ouverture de l'Exposition universelle. Il est évident que, au-delà de leur actualité simultanée, le Parc et l'aquarium présentent de grandes similitudes, notamment à travers l'emploi de ces roches artificielles, l'aménagement de grottes et de cascades, un rapport étroit au sous-sol[3] et, en somme, une dialectique très manifeste à l'époque, celle de la nature et de l'artifice.

De l'art du jardin, de la serre et de l'aquarium

Au Champ de Mars, le Jardin réservé est un lieu d'exposition d'une nature qui se montre sous des formes variées. Les produits de l'horticulture, de la botanique, ou encore de la pisciculture sont exposés comme des spécimens et comme les fruits du progrès de la maîtrise de l'homme sur la nature. Le Jardin réservé reflète et complète en cela le projet d'« Exposition universelle » tel que le sociologue saint-simonien Frédérique Le Play l'avait élaboré en 1855. Quand celui-ci devient le Commissaire Générale de la manifestation de 1867, en élargissant l'exposition aux produits naturels vivants, l'expression prend tout son sens[4] : « Vraiment universelle, note Armand Landrin, l'Exposition permettra aux hommes spéciaux d'étudier avec fruit, non seulement les beaux-arts, l'industrie, l'agriculture, mais encore les sciences pures elles-mêmes ».[5] Le visiteur de l'Exposition embrasse le monde dans un espace-temps réduit et se trouve confronté à une vision alternée du monde animal, végétal et humain. L'Exposition permet ainsi des chevauchements et des superpositions de ces différents mondes. C'est le fondement même du projet qui offre des « espaces de condensation » des temporalités et des règnes animaux, végétaux, humains, au point qu'il contribue à « abolir les clivages entre la matérialité et l'intelligence, entre la nature et l'artifice également ».[6]

Les deux aquariums du Jardin réservé répondent au même principe, ils en sont l'expression éclatante. Ils y répondent à la fois dans leur structure intrinsèque, c'est-à-dire leur technicité, leur architecture de ferre, de verre et de mortier, mais aussi par la proximité qu'ils entretiennent avec les autres formes d'exposition, qu'elles soient dans une immédiate proximité ou non. La couverture de fer et de verre de l'aquarium marin rappelle la Grande Serre botanique qui le jouxte. Le développement des serres dans le Jardin réservé – y compris sous ses formes prises à l'aquarium – participe directement du fantasme de rassembler la totalité du monde naturel en un espace maîtrisable. Un article publié dans *L'Illustration* à l'automne 1867 commente l'exposition et ses serres qui recouvrent l'utopie d'un inventaire de l'univers : « cette collection de serres de toute grandeur et de toute température où, chaque climat, chaque pays, chaque famille de végétaux sont venus et viennent encore tour à tour amonceler des merveilles à enivrer le passant et à épuiser le nomenclateur ».[7] L'aquarium qui regroupe des espèces de régions éloignées en proposant une collection d'animaux et de végétaux aquatiques recoupe la fonction de la serre. Leur architecture présente des similitudes évidentes. Le verre et le fer assurent dans les deux cas la possibilité de recréer un milieu naturel en circuit fermé. Mais l'architecture seule ne suffit pas à garantir la vie dans ces grands vaisseaux. À l'ingénierie de la construction, il faut qu'une technique viennent s'ajouter pour assurer le maintient de ce qui est exposé – on parlerait aujourd'hui de biosystème. Dans son ouvrage *Les Jardins de Paris*, Alphonse Alphand publie le dessin en coupe d'une serre en dévoilant au sous-sol un système calorifère dissimulé à la vue des spectateurs qui permet de maintenir en vie des plantes exotiques dans un lieu pour lequel elles ne pourraient subsister. Ce type de système fait écho avec ceux qui assurent une survie aux poissons dans les grands aquariums publics. Dans les deux cas, c'est un réseau complexe d'air ou de fluide qui assure aux dispositifs les conditions requises pour maintenir en vie les végétaux et les animaux. Du côté de la serre, c'est l'air chaud qui vient en appui du dispositif quand, à l'aquarium, l'air comprimé ou l'eau propulsée permet de donner un supplément d'oxygène et de maintenir un mouvement continuel à l'élément liquide. Par ailleurs, dans certains cas, au Jardin d'acclimatation (1861) par exemple, un système de refroidissement ou de réchauffement de l'eau par voie de canalisation a été imaginé pour l'équilibre général du monde exposé à la vue des spectateurs.[8]

Un voile sur l'artisanat et la technique

Rufz de Lavison avait défini l'aquarium, en s'appuyant sur l'exemple du Jardin d'acclimatation, comme, « dans son essence, un appareil hydraulique et pneumatique des plus complexes ».[9] L'aquarium marin de l'Exposition universelle de 1867 n'est pas moins technique. Il en contient à peu de choses près les mêmes principes. Néanmoins, le projet, l'architecture et la scénographique sont de tout évidence plus ambitieux et nécessitent des aménagements qu'il convient de détailler pour en comprendre la portée symbolique.

D'un point de vue matériel, les cuves des bacs sont édifiées en bois selon les principes de la charpente maritime et forment comme des coques de bateaux qui seraient renflouées après avoir été coulées. L'organisation architecturale de l'ensemble soustrait les traces de ce savoir artisanal aux yeux du public, au même titre que la machinerie des pompes est reléguée en dehors du parcours. Sur cette base artisanale, des cadres de fer réalisés par Gustave Eiffel permettent d'enchâsser des vitres fournies par l'usine de Saint-Gobain que les concepteurs voulaient parfaitement planes et translucides (fig. 1). Le travail de l'ingénieur se combine ici avec celui du charpentier et du maçon afin de produire un objet inédit qui s'insère parfaitement dans le programme utopique, esthétique et technique de l'Exposition universelle. L'artisanat et la technique industrielle sont les deux piliers d'une construction qui vise à produire le sentiment d'une nature, certes artificielle, mais néanmoins à l'image d'un monde rêvé. Les détails techniques (le bois, l'armature de fer, les pompes) sont dissimulés au regard pour orienter celui-ci sur la seule vue magique des aquariums et de leur contenu. Car nous avons là un dispositif, une architecture et une scénographie sophistiqués dont la concrétisation trouve sa finalité dans un spectacle qui s'adresse à un observateur venu découvrir et contempler les fonds sous-marins. C'est aussi l'impression de Henri de la Blanchère pour qui « l'aspect vraiment grandiose, imposant et inattendu de cette construction – dont on ne soupçonne pas au premier abord l'importance – frappe vivement l'esprit des visiteurs »,[10] ou encore celle de l'ingénieur Oppermann qui sait oublier pour un temps sa grille de lecture technique appliquée à l'aquarium et rapporte qu'« en pénétrant dans cette salle, on se croit transporté sous le sol qui forme le fond de la mer ».[11] Ce principe de la soustraction de la technique aux yeux du spectateur qui se fonde sur la nécessité de produire du merveilleux magique, rencontre une forme de dévoilement en dehors de l'aquarium. Les machines et le savoir-faire technique, s'ils sont cachés à l'aquarium, sont néanmoins accessibles à proximité, dans les différents lieux, un peu comme si l'Exposition universelle, dans sa totalité, recelait les clefs de compréhension de l'élaboration technique de ce nouveau dispositif et donnaient au spectateur, au moins théoriquement, s'il le souhaite, la possibilité d'avoir une vision complète des rouages techniques des objets soumis à son regard.

Un refuge de silence

Les très beaux dessins préparatoires rehaussés à l'aquarelle de l'Album du Parc (fig. 2) laissent entrevoir les espaces de circulations de l'édifice qui abrite l'aquarium marin. Trois espaces distincts forment la scénographie du lieu. La serre est un espace vide dont la seule fonction est de couvrir le bâtiment et d'éclairer le second espace qui contient les vingt-deux bacs. Une photographie des travaux et les nombreuses gravures publiées à l'occasion de l'exposition indiquent qu'un plafond de verre permettait au visiteur de se croire immergé au milieu de l'élément aquatique et voir, par le dessous, des poissons évoluer dans l'eau (fig. 3). Enfin, le sous-sol, sombre, est pourvu d'une seule baie aquatique.

De l'espace couvert par la serre jusqu'au sous-sol dont les méandres reproduisent l'intérieur d'une grotte, le bâtiment offre au spectateur la possibilité d'une expérience sensorielle induite par des passages variés, de la lumière à l'obscurité, qui relèvent d'une théâtralisation du parcours. Les récits de la visite de l'aquarium fournissent de précieux documents permettant d'appréhender à la fois l'impression générale produite sur le spectateur, et le processus de théâtralisation qui découle de la déambulation. Henri de la Blanchère, qui sera par ailleurs l'auteur du projet de l'aquarium pour l'Exposition de 1878, fait un compte-rendu de sa visite pour la célèbre publication *L'Exposition Universelle de 1867 illustrée* de Ducuing : « En arrivant dans le jardin réservé par la porte principale, vous apercevez un peu sur votre gauche la sombre ouverture d'une caverne. C'est l'aquarium marin qui est là. À droite, à gauche, devant vous des stalactites ou stalagmites, descendant des voûtes ou remontant du sol ».[12] L'auteur décrit les nombreux obstacles rencontrés, « pestant et maugréant contre cet aquarium dans lequel on ne voit rien »,[13] avant de pouvoir enfin se trouver face aux animaux marins. Il ne cache pas non plus sa déception quand il se trouve devant les premiers bacs du sous-sol : « Vous n'y voyez rien … que l'eau qui fait miroir et vous renvoie votre propre image ! ».[14] Son récit met en scène l'espace qui impose au visiteur une progression initiatique, théâtralisée, dans les profondeurs de la grotte et des fonds sous-marins : « Ici se renouvelle la scène de la première entrée : glaces enchâssées dans les rochers de tous côtés, eau derrière, poissons ; … on approche, on se voit, … ce n'est pas pour cela qu'on est venu, on se recule, on revient, on se penche et, avec bien de la peine, on finit par apercevoir vaguement quelques crabes, quelques actinies accrochées aux rochers ».[15] L'aquarium apparaît bien comme un décor dans lequel le visiteur va de déceptions en surprises, avant de se retrouver devant le spectacle tant attendu :

> *Mais non ! – Voici, là-bas, de nouveaux degrés qui se perdent dans le sol. Essayons cette descente […] Nous voilà partis pour les profondeurs de la mer. Quinze à vingt marches à descendre et nous nous trouvons dans une grotte souterraine. La voûte est soutenue par de forts piliers naturels, les stalactites pendent de toutes parts, l'eau suinte goute à goute des rochers et clapote dans des plis du terrain. Nous tournons, point d'issue, sommes-nous donc prisonniers dans les domaines de l'eau ? […] O bonheur ! Au détour d'un pilier une voie se présente à nos yeux. C'est un escalier qui remonte à la surface du sol … […] Nous montons … Ici se présente le plus bel effet de l'aquarium marin, effet qui, à lui seul, vaut toutes les autres merveilles. Au moment où vous croyez revoir le ciel bleu, vous émergez dans les domaines de l'eau. Vous sortez de terre au centre d'une salle oblongue – toujours en rochers bien entendu – dont toutes les parois en glaces sont*

> *des murailles d'eau de mer. Tout autour de vous est la mer sous une épaisseur énorme de 1 à 2 mètres : au dessus de votre tête l'eau … partout des êtres marins qui vivent, glissent et jouent silencieusement comme des fantômes.*[16]

L'aquarium dévoile un refuge silencieux dans lequel les poissons appartiennent à un autre monde, celui des esprits ou tout du moins un monde qui semble sorti d'une rêverie. L'antre que propose l'aquarium offre un spectacle en mouvement, mais un spectacle calme car, derrière la vitre, le milieu immergé du monde aquatique est un monde du silence. L'aménagement des grottes artificielles, le parcours méandreux et la mise en scène générale de l'aquarium ont pour effet d'offrir au spectateur un sas de décompression entre deux espaces. Le visiteur de l'aquarium est projeté dans un univers reflétant l'image d'une nature inaccessible, vierge de toute activité humaine qui, justement, s'étale avec force dans toute l'Exposition. L'image vue à travers les vitres de l'aquarium, appuyée par la mise en scène des grottes primitives, donne accès à un temps et un espace qui n'auraient pas été touchés par les effets de l'ère industrielle. En cela, ce monde d'un autre âge semble en tout point entrer en opposition avec le spectacle assourdissant de l'industrie et des machines mises en mouvement pendant le temps de l'Exposition. La retraite que trouve Henri de la Blanchère à l'aquarium apparaît comme un havre de paix en face de la Galerie des machines qui, à lire Hyppolyte Gautier, laisse une impression saisissante : « de gigantesques amas de métaux se dressent comme des trophées, de larges escaliers donnent accès à la plateforme qui fait le tour complet du bâtiment ; une multitude de machines qui s'agitent en tous sens, et les mille bruits qui s'élèvent de toute part vous avertissent que vous êtes dans le temple du travail ».[17] Très proche de l'impression de Gautier, un autre témoin décrit comment ce chaos plonge dans « une espèce de stupeur la personne qui pénétrait pour la première fois dans cette galerie ».[18] « Le bruit des cloches, le sifflement des machines à vapeur : voilà ce qu'était le Parc du Champ de Mars pendant l'Exposition universelle »,[19] écrit-il encore. Mais cette opposition ne doit pas cacher une disjonction entre la réalité de l'aquarium comme forme machinique et technique aboutie du progrès et l'image d'un « paradis »[20] perdu vue à travers la vitre de l'aquarium.

Principe inclusif

Depuis la première monstration publique dans le jardin zoologique de Regent's Park à Londres jusqu'à l'Exposition universelle de Paris en 1867, les modalités techniques de l'aquarium et de ses mises en scène ont radicalement changées. Alors qu'à Londres l'aquarium était vu comme une curiosité qui, même s'il avait profondément bouleversé la perception du monde subaquatique, demeurait un ornement, à Paris, son échelle monumentale, son architecture, son intégration comme pierre de touche dans un Jardin programmatique, l'élaboration complexe d'une mise en scène des abysses qui transportait les spectateur dans une temporalité autre, font de lui un objet symbolique complexe qui entre dans la chaîne d'un imaginaire propre à la société industrielle de la seconde moitié du 19e siècle. L'aquarium de 1867 s'intègre en effet comme une pièce importante dans le rouage de l'organisation d'une manifestation qui avait la particularité de rassembler à partir du « concept d'universalité » la totalité des « artefacts issue du travail de l'homme ».[21] Si le « concept d'universalité » avait trouvé sa pleine expression encyclopédique en intégrant les produits naturels, il n'en reste pas moins que l'ensemble de l'exposition était fondé et orchestré par le culte de l'industrie. Dans ce cas, la question se pose de savoir quelle est la place et la fonction de l'aquarium, image d'une nature préservée et rêvée, dont la fonction première, *a priori*, est d'exposer des créatures aquatiques vivantes au sein de cette grande célébration. L'Exposition universelle de 1867 s'est élaborée selon un principe inclusif. Cela a été le propre de toute exposition universelle au 19e siècle, mais il semble que, dans ce cas précis, la concrétisation et la réussite de cette ambition ont été particulièrement efficaces. À l'intérieur de ce processus d'inclusion, l'aquarium, vu comme dispositif d'exposition complexe et emblématique de son temps, se situe au croisement d'un grand nombre de « mythologies techniciennes », en portant et en générant en lui toutes les contradictions et les condensations spatio-temporelles de cette célébration du progrès. Définir l'aquarium comme lieu de ces expressions est une manière, à la suite de Liliane Hilaire-Perez, de « poser la question de la genèse de la technique, comme mode d'intellection du réel, dans les sociétés industrielles, c'est-à-dire de relier ces pratiques et ces représentations à la constitution sur le long terme d'un 'espace de la technique' marqué par une pensée opératoire ».[22] Dans son *Poème didactique en quinze chants* qui célèbre l'Exposition universelle de 1867, tout au long de ses quatre cents pages, Antoine-Gaspard Bellin passe en revue l'ensemble des inventions et curiosités de la manifestation. L'aquarium est intégré parmi l'ensemble :

Des masses de granit, géantes barricades,
Au fond de ces bosquets épanchant leurs cascades,
Supportent les arceaux d'un palais de cristal,
De la Flore exotique élégant piédestal.
Un lac s'étend auprès et recueille les ondes
Qui portent la fraîcheur dans deux gorges profondes.
Des rochers, élevant leurs fronts jusques aux cieux,
En défendent l'entrée et dérobent aux yeux
De leurs flancs entr'ouverts les cavités secrètes.
Des mystères nouveaux y cachent leurs retraites.
En ce lieu l'aquarium étale ses splendeurs
Et nous fait de la mer sonder les profondeurs :
De ses flots l'eau salée en tous sens nous entoure.
Dans ces grottes, où vient faiblir notre bravoure,
L'abîme est là, dressant ses humides remparts
Et nous investissant, sombre, de toutes parts,
Il fait courir sans fin au-dessus de nos têtes
Ses monstres familiers, confidents des tempêtes.[23]

Le poème s'apparente à un « catalogue »[24] qui reflète bien le caractère accumulatif de l'exposition. Si l'aquarium n'est pas davantage mis en exergue que le reste des inventions, le poème engage à considérer chaque partie en fonction du tout.

L'esprit de Saint-Simon

Antoine Picon a montré comment l'utopie saint-simonienne de la première moitié du 19e siècle avait très largement irrigué la conception générale de l'Exposition de 1867. C'est là un trait distinctif qu'elle entretient avec les expériences anglaises. Cela s'explique par la présence, nombreuse, d'anciens membres des mouvements utopiques parmi les organisateurs de la manifestation parisienne et, au premier chef, celle de Frédéric Le Play, nommé Commissaire Général. C'est à travers lui que se dessine nettement l'orientation saint-simonienne du culte de l'industrie et de l'utopie sociale qui passe par la célébration spectaculaire du travail et des produits de l'industrie. Car les utopies de la première moitié du 19e siècle avaient intégré que « le travail productif a besoin de célébrations pour constituer un ferment d'unité annonçant l'avènement d'un nouvel âge organique de la société qui verrait la fin des divisions et des conflits ».[25] Si la conception saint-simonienne de l'industrie s'étend à l'ensemble des activités de l'homme, le progrès scientifique et industriel constitue le socle de l'utopie. La *Doctrine* de Saint-Simon exprime en cela que l'industrie recouvre une promesse : « L'objet de l'industrie est l'exploitation du globe, c'est-à-dire l'appropriation de ses produits aux besoins de l'homme, et comme en accomplissant cette tâche elle modifie le globe, le transforme, change graduellement les conditions de son existence, il en résulte que par elle, l'homme participe, en dehors de lui-même en quelque sorte, aux manifestations successives de la divinité, et continue ainsi l'œuvre de la création. De ce point de vue l'industrie devient le culte ».[26] À ce culte, il faut une célébration organisée selon une liturgie qui va se décliner tout au long des exposition universelles et qui trouvera sa pleine réalisation en 1867. L'étude de ces grandes manifestations internationales et de l'utopie qui les traverse permet, selon Picon, « de mieux appréhender l'arrière-plan quasi religieux qui les caractérise ».[27]

De la religion au culte de l'industrie

Le caractère religieux des expositions universelles est à prendre au sens littéral. Au-delà des différences notables entre les généalogies utopiques dont les expositions anglaises et françaises peuvent se réclamer, Picon fait remonter le signe du religieux à l'Exposition londonienne de 1851, au Crystal Palace et à sa polychromie que les photographies en noir et blanc qui nous sont parvenue ont eu tendance à faire oublier. Ce renvoi aux couleurs des architectures religieuses, telles que l'archéologie les découvrait au même moment, fait du Crystal Palace une cathédrale de l'industrie. Il en est de même pour les grandes galeries des machines, notamment celle de l'Exposition de 1889 que le décor polychrome de l'entrée principale affiliait, là encore, à un bâtiment sacré. Aux expositions universelles, le caractère religieux avait pour fonction de susciter auprès du public un sentiment de communion qui devait converger vers la célébration d'un âge d'or industriel. Ce rapprochement n'avait pas échappé à certains commentateurs du spectacle dont in fixait la liturgie à chaque grand rassemblement. À l'aquarium de 1867, Henri de la Blanchère décrit « une grotte spacieuse, s'ouvrant sous des colonnes de pétrification, où les pendentifs abondent et qui forme le proscenium du temple des poissons »[28] avant de considérer et de voir l'aquarium marin « comme une cathédrale avec sa crypte auprès d'une jolie chapelle ».[29] Charles Alfred Oppermann, de son côté, s'il ne mentionne pas directement les traits d'un temple ou d'une cathédrale, reste « frappé de la grandeur et de la majesté de cette construction ».[30] Le sentiment religieux à l'aquarium se redouble face à l'image renvoyant à un monde d'avant la Création. Le succès du livre *Le Monde avant la création de l'homme, ou le Berceau de l'univers* de Carl Gottfried Wilhelm Vollmer (1797-1864), qui connut plus de cinquante éditions et fut traduit en Français dès 1856 sous le pseudonyme W. F. A. Zimmermann, a pu en partie alimenter ce regard. Car, en dehors des échos religieux renvoyés par l'architecture et la mise en scène, la fréquentation de l'aquarium a très tôt été considérée comme celle d'un « théâtre moral ». Devant l'aquarium du Jardin d'acclimatation, Rufz de Lavison est pris de « méditations religieuses »[31] et traduit son sentiment : « n'avez-vous pas senti ce que l'on sent sur les bords de la mer, sous l'ogive des vieilles cathédrales, en face de toute grande manifestation de la puissance divine ? Votre dernière, comme votre première impression n'a-t-elle pas été un sentiment d'admiration ? N'avez-vous pas senti s'échapper de vos poitrines le cri d'un grand naturaliste, ce cri d'Etienne Geoffroy Saint-Hilaire : Gloire à Dieu ! ».[32]

Images de la pensée énergétique et vitalisme

Si le sentiment religieux à l'aquarium n'est pas de même nature que celui généré au milieu de la Galerie des machines, il participe néanmoins du même projet global. L'arrière-plan religieux, nous l'avons vu, sert le culte de l'industrie. Alors, si l'aquarium à l'Exposition universelle doit être appréhendé comme une partie d'un tout, comment peut-il être au service de ce culte, et en quoi s'intègre-t-il dans cette vaste mise en scène ? En quoi le spectacle de l'aquarium est-il comparable à celui offert par l'exposition des machines ?

Depuis l'Exposition de 1855, les machines de l'industrie ont été exposées en mouvement dans le but de fasciner le public tout en lui donnant la possibilité de comprendre le processus industriel exposé sous ses yeux.[33] En réalité, la mise en mouvement des machines avait été initiée, mais partiellement, à l'Exposition londonienne de 1851. Avant cette date, aux Expositions universelles, les machines étaient montrées à l'arrêt. En 1855, Le Prince Napoléon, Président de la Commission impériale de l'Exposition, souhaite aller plus loin et « mettre tout le mécanisme sous les yeux du public ».[34] Cette mise en scène dynamique des machines, au-delà du spectacle qu'elle générait, permettait de proposer au visiteur « un objet d'étude »[35] et de compréhension des diverses forces motrices en distinguant les « poulies motrices […] de celles des métiers par des couleurs spéciales ».[36] L'Exposition de 1867 prolongera et confortera l'expérience en faisant du principe dynamique un élément central : « Les machines exposées sont mises en mouvement par divers appareils moteurs, distribués de distance en distance, dans ce vaste pourtour. Ces appareils constituent eux-mêmes une exposition ».[37] Le mouvement des machines est en soi une exposition, c'est aussi un spectacle : « Voilà un grand et beau spectacle : Celui de tout ce mouvement donné par l'homme à des êtres de seconde main créés par lui, à cette légion d'ouvriers en fer et en cuivre, sortis tout équipés de son cerveau, disciplinés par lui, majestueux, quelquefois risibles, mais toujours dociles serviteurs, accomplissant méthodiquement leur tâche avec la régularité qu'il leur a assignée ».[38] De même, Louis Figuier, grand commentateur des Expositions et des merveilles de la science, file la même métaphore : « Qu'il nous soit permis de rappeler les belles dispositions de cette admirable galerie des machines en mouvement, où nous avons passé nos plus belles heures d'étude. […] Toutes ces machines en action, ces différents mécanismes incessamment en jeu, les mille enseignements qui résultaient de leur examen, formaient, par leur ensemble, le spectacle le plus magnifique que l'industrie humaine ait jamais offert à un esprit réfléchi et studieux ».[39]

Le mouvement a bien pour but de produire du spectaculaire et de susciter la fascination du public. Entre pédagogie et divertissement, les Expositions universelles, surtout en France, combinent les deux aspects. C'est là, encore une fois, une manifestation de l'héritage utopique tel que l'a analysé Picon.[40] Mais, au-delà de la pédagogie et du spectaculaire, il faut aussi y voir une « nouvelle stratégie plus globale de mise en scène dominée par la pensée énergétique (thermodynamique, circulation des flux, production d'énergie, entropie) ».[41] L'aquarium, selon nous, présente un autre versant de cette pensée énergétique à l'Exposition car son dispositif repose en partie sur le principe de la circulation de l'élément liquide. À l'aquarium, le mouvement est double : d'un côté il présente des animaux en vie, dans leur milieu naturel recréé, donc en mouvement, de l'autre, pour que cette vitalité soit possible, une machine est bien en mouvement. Mais, contrairement à la Galerie des machines, celle de l'aquarium est dissimulée au regard du spectateur. C'est la condition de l'émerveillement qui repose sur une nature recréée, mais dont un des artifices principaux est caché. Montrer la machinerie de l'aquarium, et notamment son mouvement qui est à l'origine de celui des animaux, constitue une limite à ne pas franchir. De manière significative, dans son avant-projet de disposition des aquariums au Trocadéro (Exposition universelle de 1878), Henri de la Blanchère propose que « en face de l'escalier de descente du public, la machinerie en mouvement soit, derrière un vitrage, la première chose qui frappe ses yeux et lui fasse comprendre la circulation générale de tout l'ensemble ».[42] Sur le document, le destinataire du rapport laisse une *marginalia* contenant cette opinion définitive : « Il n'y comprendra rien ».[43] Il n'est pas question de montrer à l'aquarium l'envers du décor, encore moins de mettre à disposition dans l'enceinte du bâtiment les éléments de compréhension de son fonctionnement. Tous les éléments de cet artifice se retrouve ailleurs dans l'exposition, dans la Galerie des machines notamment. L'apparition des poissons en mouvement derrière l'écran de la vitre doit rester de l'ordre du merveilleux et du magique.

Le mouvement à l'aquarium peut néanmoins apparaître comme une antithèse de celui des machines exposées dans la Galerie. Tout semble opposer le mouvement liquide, fluide, silencieux et libre des poissons au mouvement saccadé, métallique et bruyant des machines. Mais le mouvement de l'aquarium peut aussi se voir comme l'image idéalisée de la pensée énergétique et vitaliste qui sous-tend la mise en scène de l'exposition, l'accomplissement du rêve que l'on prête au machine : voir ces monstres d'acier comme des êtres vivants. Devant « ces milliers de bobines tournant avec une régularité si grande, et ces fils qui vont s'enroulant docilement sans qu'aucune main ait besoin de les guider », Hyppolite Gautier ne voit que vie dans ses machines, au point de substituer des organismes vivants aux machines mécaniques : « ces ouvrières de fer vivent, elles pensent, elles sont intelligentes : le souffle d'un génie créateur les anime ».[44] Les poissons dans l'aquarium seront l'image d'une vie insufflée par la mécanique et le mouvement de la machine. Une nature et une vitalité qui ne doivent leur existence qu'à l'artifice d'une technique industrielle. Plus largement, c'est à l'art des automates qu'il s'agit de se référer pour comprendre en quoi les poissons à l'aquarium peuvent constituer l'image d'une nature vivante reliée à un mécanisme artificiel.[45]

Illustrations

1. L'Exposition universelle de 1867 illustrée, 25 novembre 1867.
2. Aquarium d'eau de mer, aquarelle, 1867, Album du Parc, Archives nationales.
3. M. Gaildrau, *Aquarium d'eau de mer*, L'Exposition universelle de 1867 illustrée, 5 septembre 1867.

Notes

[1] Francis Aubert notait à propos de l'Exposition maritime internationale de 1868 : « Notre pays a des conquêtes commerciales à faire dans toute l'Amérique du Sud, sur le littoral africain, dans les Indes, en Cochinchine, en Océanie : un immense avenir s'ouvre à elle dans ces régions […] Cette exposition sera donc une manifestation complète du progrès et du perfectionnement de la navigation internationale, à vapeur ou à voile, en même temps qu'elle mettra en évidence les ressources de notre commerce. Elle continuera, dans ce domaine spécial et pourtant bien vaste, l'idée de l'Exposition de 1867 ». Francis Aubert, « L'exposition maritime internationale du Havre », dans *Exposition maritime internationale du Havre, Journal officiel*, n° 1, 1868, p. 3.

La maîtrise sur les éléments naturels participe directement du principe de la colonisation. Plus largement, la question de la nature, et donc des ressources pour alimenter la population et les produits de l'industrie, sont à considérer comme partie intégrante de la colonisation. Sur les effets visibles de la colonisation à l'Exposition universelle de 1867, notamment à travers l'architecture des Pavillons, voir Christiane Demeulenaere-Douyère (sous la direction de), *Exotiques expositions… Les expositions universelles et les cultures extra-européennes. France, 1855-1937*, Somogy/Archives nationales, Paris 2010.

[2] Cité par Adolphe Démy, *Essai historique sur les expositions universelles de Paris*, Librairie Alphonse Picard, Paris 1907, p. 131.

[3] Antoine Picon note à ce titre qu'aux Buttes-Chaumont, « Au plan symbolique, il faut noter l'importance de la thématique du sous-sol dans un parc qui tire son origine de l'exploitation du gypse sou- terrain ». Picon fait aussi le rapprochement avec l'Exposition universelle de 1867 : « Le soin méticuleux avec lequel Napoléon III inspecte le parc en cours de réalisation témoigne de cette interaction constante du pratique et du symbolique. Il n'est pas non plus fortuit que les Buttes-Chaumont fassent partie intégrante de l'Exposition universelle de 1867. D'exposition en exposition, le Paris du XIXe siècle donne à voir son sous-sol, ses entrailles cartographiées et aménagées avec une précision et une ampleur grandissantes ». Voir Antoine Picon, « Nature et ingénierie : le parc des Buttes-Chaumont », dans *Romantisme*, n° 150, 2010, pp. 37-38.

[4] Voir Liliane Hilaire-Pérez, « Les expositions universelles en France au XIXe siècle. Lignes de tension et lignes d'horizon dans le champ technologique à l'ère de l'industrialisation », dans Anne-Laure Carré, Marie-Sophie Corcy, Christianne Demeulenaere-Douyère, Liliane Hilaire-Pérez, *Les Expositions universelles en France. Techniques. Publics. Patrimoines*, CNRS Éditions, Paris 2013, p. 17.

[5] Armand Landrin, « Les sciences naturelles à l'Exposition », dans *L'Album de l'Exposition illustrée. Histoire pittoresque de l'Exposition universelle de 1867*, G. Richard, Paris 1867, p. 126.

[6] Liliane Hilaire-Pérez, « Les expositions universelles en France au XIXe siècle. Lignes de tension et lignes d'horizon dans le champ technologique à l'ère de l'industrialisation », cit., p. 18.

[7] Paul-André Rémy, «Le Jardin Réservé», dans *L'Illustration, Journal Universel*, octobre 1867, cité dans Maryline Cettou, « Jardins d'hiver et de papier : de quelques lectures et (ré)écritures fin-de-siècle », dans *A contrario*, n° 11, 2009, p. 104.

[8] Alford Llyod, « Note sur l'aquarium du Jardin d'acclimatation », dans *Bulletin de la Société du Jardin d'acclimatation*, Séance du 3 janvier 1862, Paris 1862, pp. 108-109 : « Cette circulation de l'eau est produite de la manière suivante. On emploie un courant d'eau amené par le grand tuyau de la concession d'eau qui alimente le bois de Boulogne ; cette eau y est introduite par une forte pression, et l'on sert pour comprimer une certaine masse d'air en un volume moindre : cet air comprimé, dès qu'on lui permet d'exercer une pression sur une

partie de l'eau de mer contenue dans un cylindre fermé qui se trouve au-dessous du niveau de l'aquarium, la fait monter et entrer avec une grande force dans chacun des réservoirs, où elle s'introduit par un petit jet. Par la pression à laquelle on soumet l'eau de mer, celle-ci absorbe beaucoup d'air qu'elle entraîne avec elle dans les réservoirs, où les animaux en profitent. […] Comme les cylindres fermés sont enfouis sous terre, on y maintient facilement une température égale à 16 degrés centigrades environ, ce qui est à peu près la température uniforme de l'eau dans l'Océan ».

[9] Rufz de Lavison, « Sur l'aquarium du Jardin d'acclimatation », dans *Bulletin de la Société du Jardin d'acclimatation*, Séance du 10 février 1863, Paris 1863, p. 3.

[10] Henri de la Blanchère, « L'Aquarium marin », dans *L'Exposition Universelle de 1867 illustrée*, E. Dentu, Paris 5 septembre 1867, p. 82.

[11] Charles Alfred Oppermann, *Visite d'un ingénieur à l'exposition universelle de 1867. Notes et croquis. Chiffres et faits utiles*, Librairie polytechnique de J. Baudry, Paris 1867, p. 217.

[12] Henri de la Blanchère, « L'Aquarium marin », cit., p. 82.

[13] *Ibidem*.

[14] *Ibidem*.

[15] *Ibidem*.

[16] *Ibidem*.

[17] Hippolyte Gautier, *Les Curiosités de l'Exposition universelle de 1867*, Ch. Delagrave et Cie, Paris 1867, p. 67.

[18] *Grand Album de l'Exposition Universelle – 1867*, Michel Lévy frères, Paris 1868, p. x.

[19] *Idem*, p. xii.

[20] C'est le terme qu'emploie De Saint-Germain (Jules Tardieu) dans sa *Lettre à la Dame de cœur sur l'exposition universelle* pour qualifier le Jardin réservé, cité par Adolphe Démy, *Essai historique sur les expositions universelles de Paris*, cit., p. 131.

[21] Liliane Hilaire-Perez, « Les expositions universelles en France au XIXe siècle. Lignes de tension et lignes d'horizon dans le champ technologique à l'ère de l'industrialisation », cit., p. 15.

[22] *Idem*, p. 30.

[23] Antoine-Gaspard Bellin, *L'Exposition universelle : poème didactique en quinze chants*, Garnier frères, Paris 1867, p. 388.

[24] Voir Nicolas Wanlin, « L'imaginaire technique dans la poésie industrielle du XIXe siècle », dans *Romantisme*, n° 150, 2010, pp. 51-61.

[25] Antoine Picon, « Nature et ingénierie : le parc des Buttes-Chaumont », cit., p. 39.

[26] *Doctrine de Saint-Simon. Exposition*, Deuxième année, Bureau de l'organisateur, Paris 1830, p. 115, cité par Antoine Picon, « Nature et ingénierie : le parc des Buttes-Chaumont », cit., p. 40.

[27] Antoine Picon, « Nature et ingénierie : le parc des Buttes-Chaumont », cit., p. 39.

[28] Henri de la Blanchère, « L'Aquarium marin », cit., p. 82.

[29] *Ibidem*.

[30] Charles Alfred Oppermann, *Visite d'un ingénieur à l'exposition universelle de 1867. Notes et croquis. Chiffres et faits utiles*, cit., pp. 217-218.

[31] Rufz de Lavison, « Sur l'aquarium du Jardin d'acclimatation », cit., p. 19.

[32] *Ibidem*.

[33] Sur la mise en mouvement des machines aux Expositions universelles, voir François Jarrige, « Machines en mouvement. Les ambivalences du spectacle technique dans les expositions universelles du Second Empire », dans Anne-Laure Carré, Marie-Sophie Corcy, Christianne Demeulenaere-Douyère, Liliane Hilaire-Pérez (sous la direction de), *Les Expositions universelles en France. Techniques. Publics. Patrimoines*, cit., pp. 129-138. Jarrige donne par ailleurs une interprétation intéressante de cette mise en mouvement lors de l'Exposition de 1855 : « Soucieux de séduire les classes populaires, de fasciner le public pour mieux légitimer son pouvoir, le nouveau régime entend dissimuler derrière le mouvement incessant des machines le blocage institutionnel qui le caractérise à l'heure de l'Empire autoritaire », p. 129.

[34] Napoléon-Joseph-Charles-Paul Bonaparte, *Rapport sur l'Exposition universelle de 1855, présenté à l'Empereur par S. A. I. le prince Napoléon*, Imprimerie Impériale, Paris 1857, p. 58.

[35] *Idem*, p. 59.

[36] *Idem*, p. 57.

[37] Hyppolite Gautier, *Les Curiosités de l'Exposition universelle de 1867*, cit., p. 14.

[38] *Idem*, pp. 67-68.

[39] Louis Figuier, « Rapport sur l'exposition universelle de 1855 », dans *L'année scientifique et industrielle*, Hachette, Paris 1858, p. 569, cité par François Jarrige, « Machines en mouvement. Les ambivalences du spectacle technique dans les expositions universelles du Second Empire », cit., p. 133.

[40] Picon note : « La plupart des études consacrées aux utopies sociales de la première moitié du XIXe siècle ont eu tendance à minimiser le caractère divertissant qu'elles présentent aux yeux de leurs contemporains. […] Ces mouvements utopiques accentuent pourtant à dessein certaines de leurs bizarreries afin d'attirer l'attention du public. […] [et] rendre indissociable instruction et divertissement, instruction et spectacle. […] Ce mélange des genres va définir tout au long du second XIXe siècle les expositions universelles parisiennes. […] Il est intéressant de comparer sur ce point l'évolution londonienne à la trajectoire parisienne. […] À Londres, ces deux registres vont se dissocier et s'incarner dans des circonstances et des institutions spécialisées au lieu de continuer à s'exprimer au travers de grandes expositions. […] Les expositions universelles parisiennes maintiennent en revanche l'unité de ces deux fonctions. Peut-être faut-il y voir l'influence de l'héritage utopique ». Antoine Picon, « Nature et ingénierie : le parc des Buttes-Chaumont », cit., pp. 42-43.

[41] François Jarrige, « Machines en mouvement. Les ambivalences du spectacle technique dans les expositions universelles du Second Empire », cit., p. 132.

[42] Henri de la Blanchère, *Rapport à l'appui de l'avant-projet de disposition des aquariums au Trocadéro (Exposition Universelle de 1878)*, Paris 14 janvier 1877, n. p. Archives nationales F12/3508.

[43] *Ibidem*.

[44] Hyppolite Gautier, *Les Curiosités de l'Exposition universelle de 1867*, cit., p. 69.

[45] Philippe Morel à propos des automates dans les grottes: « L'invisibilité de la puissance motrice est la condition de l'effet d'émerveillement produit par un artifice qui se mue en œuvre de nature et devient le reflet de la création divine ». Voir Philippe Morel, *Les grottes maniéristes en Italie au XVIe siècle*, Macula, Paris 1998, p. 118.

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The Electricity Fairy, Loïe Fuller's Serpentine Dance and Cinematic Display in Paris 1900

When looking back at the Paris 1900 Exhibition, it appears that cinema was born in the midst of Art Nouveau, celebrating floral ornament, the vitality of colors and formal dynamics. The Exhibition did not only pave the way for the examining of the exhibited display of early cinema (Lumière's film projections, the "Cinéorama" by Raoul Grimoin-Sanson, etc.). It also connected it to various spectacular exhibitions such as the *Palais de l'Électricité* (The Palace of Electricity), the *Palais de l'Optique* (The Optical Palace) that held a gigantic kaleidoscope, as well as Loïe Fuller's Theater-Museum where she performed her famous serpentine dances that enchanted the Paris smart set. With its five thousand multi-colored lamps and eight monumental lights, the Palace of Electricity was the glowing heart of the fair. At the top of the building, the Electricity Fairy was lighting up the Capital, creating a light-play of shining colors. Simultaneously, Loïe Fuller's Theater-Museum, designed by Art Nouveau designer and architect Henri Sauvage, was not only an exhibition center presenting artifacts inspired by her dances, but also a stage where she performed light dancing, emblematic of Art Nouveau in its attempt to combine artistic and technological inventions.

As it seized the ornamental issue, cinema became part of a reflection process connecting the scattered territories of art and industry, beyond the opposition between fine arts, decorative and applied arts. Within the broader end of the century cultural context of Art Nouveau, this paper aims at analyzing the relations between early cinema and visual attractions carrying a sense of modernity through colored light-plays, electric shows and kaleidoscopic visual experiences.

Paris 1900, Art Nouveau & Cinema

In 1900, all eyes were on the Paris Exhibition, which was galvanized by the combined enthusiasm of progress and modernity:

> *This great outpouring which, as Walter Benjamin noted somewhere, linked the Universal Exhibition to the collecting spirit of the time by striping objects of their commercial value in favor of their abstract value, transformed the city. The latter was successively overwhelmed by construction work that made it impracticable or even hideous, then remodeled to fit current ways. All appears as if this months-lasting disorder born from commotion which, in its chronological sequence, could have announced the end of a century, had in fact been necessary for Paris to align to the world's order and finally enter modernity.*[1]

The Exhibition marked the entry of the French capital and nation in the new century – the very century that saw the rise of cinema and celebrated, at the same time, the curved lines of Art Nouveau and the cogs of machinery: “A feeling of joy and freedom oversaw the relation to modernity triumphant in the city. The Electricity Fairy was the new myth of the time.”[2] In order to understand the links between the Art Nouveau movement and cinema, through the study of Loïe Fuller’s serpentine dance, one needs to clarify various issues related to this millenarian historical context of Parisian modernity.

The Exhibition was inaugurated with great pomp on April 14th, 1900 by French president Émile Loubet. It was to be an “assessment of the century,” as suggests the title of the book written by the exhibition’s general commissioner Alfred Picard, or “a painting of the progress of the human spirit for the entire century,” according to the then-minister of Commerce and Industry Jules Roche. It brought in about 50 million visitors and over 83,000 exhibitors from all countries, spread out over the 230 hectares offered by the capital around the Champ de Mars, on both sides of the Seine: “on the left bank, productions of the spirit and an homage to science; on the right bank, ‘luxury and pleasure’: theaters, art exhibitions, a model of the rue de Paris bringing to mind Montmartre…”[3] The 1900 Exhibition brought together cosmopolitan dreams with nationalist fervor: it was not merely the expression of a movement in favor of solidarity between people, but also a demonstration of French power and genius for everyone to see. Its scale largely exceeded that of the previous exhibitions and turned Paris into an open-air construction site, the traces of which are still visible today.

Cinema was displayed in different locations during the Exhibition, which offered this new invention the possibility of being officially and internationally acknowledged. The Exhibition thus allowed “a field of experimentation of its diverse uses with a large public,”[4] as Emmanuelle Toulet points out. In the Exhibition’s classification, cinema was, with photography, a part of class 12, which was placed under Jules-Etienne Marey and Louis Lumière’s supervision. The materials and processes used in cinema were exhibited on the first floor of the *Palais de l’Enseignement*, without a projection room. In addition to watching pedagogical films during scientific congresses and demonstrations, one could watch cinematographer Lumière’s gigantic screenings for free in the function room of the huge Galerie des Machines, a vestige of the 1889 Exhibition. The film-making apparatus has often been associated with that of the panorama or diorama. Some of these were displayed in the Exhibition, like the Transsiberian Panorama that recreated the illusion of a trip on the famous train which connects Moscow to Beijing; the Maréorama which offered a trip in the Mediterranean Sea between Marseille and Constantinople; or the famous Cinéorama by Raoul Grimoin-Sanson which took spectators for a hot-air balloon ride. The ill-defined frontiers of cinema brought about varied shapes that drew links with other types of shows. As expressed by historian Christophe Prochasson: “the fact that this magical process, that first aimed at exploring unknown land while staying in the same place, was contemporary with Méliès’ magic, which often played with the same characteristics, is a happy encounter that can’t be solely qualified as hypothetical.”[5] The importance given to cinema in the 1900 Universal Exhibition does not interest me as much as the spectacular apparatus that anticipated and prolonged the cinematographic experience, such as the gigantic kaleidoscope in the *Palais de l’Optique*, the luminous wonders of the *Palais de l’Electricité* or the sound and light shows of the *Château d’Eau*. My hypothesis is that there is a cinematographic paradigm that allows us to connect the spectacular experiences of what we call the Electricity Fairy with those of the Light Fairy. This paradigm is held by none else but Loïe Fuller in the Art Nouveau visual culture.

It is necessary to locate the birth of cinema within the ornamental mesh of an end of the century aesthetics and the rise of Art Nouveau. To best identify Loïe Fuller’s “untraceable body”[6] – to use Georges Rodenbach’s expression – one needs to explore the stage plan of the Fullerian dances presented during the Universal Exhibition. The curvy shapes, the swaying hair and the wrinkles in the veils of this serpentine dance are part of the formal language used by Art Nouveau. As Giovanni Lista states, Loïe Fuller must be seen as an inspiration to different buildings of the 1900 Exhibition: for instance, the entrances to the Parisian Metro, with its undulating lines designed by Hector Guimard, were inaugurated precisely at the time of the Universal Exhibition. The entrance door of the exhibition designed by René Binet borrows from the formal vocabulary of Islamic ornamentation, which Art Nouveau appropriates in the use of the arabesque. The Light Fairy of the *Château d’Eau* and the *Palais de l’Électricité* that overlooked the city was an avatar of the dancer, as well as the *Palais de la Danse*: “the very atmosphere of the Exhibition, everything sensational that could be seen there, reminded everyone of the luminous wonders of ‘la Loïe.’”[7] The *Château d’Eau*, designed by architects Eugène Hénard and Edmond Paulin, referred to an aesthetic of wonders which celebrated industrial progress and the energetic vitality of electricity (fig. 4). This is what Paul Morand wrote on the atmosphere of excitement that reigned over the city thanks to Loïe Fuller:

> *It was then that a strange, crackling and condensed laugh rang out: it was the Electricity Fairy. It triumphed at the Exhibition like morphine in 1900 boudoirs; it was born out of the sky like true kings. […] At the Exhibition, it is being thrown from windows. Women are bulb flowers. Bulb flowers are women. […] The ministries of the left bank themselves look like Loïe Fullers. At night, lights swipe the Champ de Mars, the Château d'Eau drips with cyclamen colors; just green drippings, orchid spurts, flaming water lilies, liquid fire orchestrations, volt and ampere debauchery.*[8]

The Electricity Fairy is the true queen of the 1900 Exhibition, "this young and bright fairy that gives contemporary industry two major characteristics: movement and light."[9] As a result of the 1900 Exhibition, art and technology seem to have been combined in an exemplary way through the fullerian dances. Paris 1900 celebrated both the architectural arabesques of Art Nouveau and the emergence of cinema – that used to be called at that time "the new art" – as well as various spectacular forms. It is precisely the relationships that are established between the ornamental question in the Art Nouveau movement, the various forms of cinematographic spectacles and the serpentine dance imagined by Loïe Fuller that interest me in this article.

Loïe Fuller's theater-museum in Paris 1900

As cinema rolled out on the entire scope of its spectacular forms during the Exhibition, the diverse ways in which it is linked to theater and the performing arts could also be explored. On the Rue de Paris, the flowering main street for theatrical and musical shows, movie-theaters could also be found, such as the Phono-Ciné-ma-Théâtre. One of the most popular Parisian attractions was the Fullerian dances, to be seen at Loïe Fuller's Theater-Museum on the Rue de Paris. By the Seine, close to the Pont de l'Alma, a statue of Loïe Fuller in the movements of her veils sat on top of the *Palais de la Danse*, but the dancer refused to perform there in protest for having been displayed as a statue while she was still alive. She thus decided to build her own pavilion in the Exhibition. After exploring different options for her project, it was decided that Loïe Fuller's Theater-Museum would be a museum space displaying pieces inspired by dancing (for instance, artifacts by Pierre Roche, François-Rupert Carabin and Manuel Orazi, that designed the posters for her shows) as well as a stage where she would perform. Young architect from Nancy Henri Sauvage was chosen to design the building. He was affiliated with the Art Nouveau movement, and a protégé of the architect and theoretician of the movement, Frantz Jourdain. Henri Sauvage first drew the plans of a small pavilion with two butterfly wings unfolding on each side of the building, located on the Cours la Reine site. In his second draft, he changed his original plans, deleted the butterfly wings and relocated the building on the Rue de Paris. His project displayed two archangels with wings linked by draping movements covering the building like a curtain. It was not enough to convince the dancer or the Exhibition's architecture department. With the help of sculptor Pierre Roche, Henri Sauvage finally revised his plans by reducing the height of the edifice, covering it with an undulating drape and adding a monumental statue of Loïe by Pierre Roche at the top, to compete with the *Palais de la Danse* (fig. 5). At night, moving projected colors illuminated the pavilion. Inside, kaleidoscopic effects were created by spotlights on the ceiling. Loïe Fuller's pavilion was imagined as a prologue, in formal empathy with her shows. According to Giovanni Lista, the main point of interest in this Art Nouveau architecture is the reproduction of Loïe Fuller's draping movements whilst imitating a butterfly, "the organic form transfigured by the choreographic art of the dancer."[10] The draping construction is also characteristic of a second phase of Art Nouveau wherein "ornaments are progressively moved to the non-supporting elements of the edifice, that is to the second level and the epidermis."[11]

Marie-Louise Fuller, also known as "Loïe Fuller" (1862-1929) was a dancer and choreographer. Foremost, she was a woman who engaged in scenic experimentation and intended to revolutionize the scenic arts at the end of the 19th century. She was a forerunner of modernity through her experimentations on the intertwining of colors, movement and light. This American dancer led her career in music-hall and performed for the first time in Paris at the Folies Bergère in 1892, where the public gave her a standing ovation. All of the Paris smart set rushed to her most famous performances (the lily dance, the fire dance and the serpentine dance) (fig. 6). She deposited patents for her scenic inventions so as not to be imitated. She is in herself quintessential of the *Belle Époque*, through her impressionist lyrism and the anti-naturalist dilution of colors, the spirituality of her Japanese-inspired calligraphic gestures and the "s" shapes, the plant evocations and the linear ornaments characteristic of Art Nouveau, her decadent taste for artifice, the neo-gothic return of the colored iridescence of stained-glass, "the fascination for apparitions brought on by the fad for occult sciences, and finally the synesthesia doctrine and the 'ideal show' dreamt up by symbolists."[12] In this way, the undulating architecture of the theater designed by Henri Sauvage for the dancer, together with Pierre Roche's sculptures and Francis Jourdain's stained-glass windows, stood side-by-side with galleries of machinery, objects and ornamental furniture by Émile Gallé and Louis Majorelle: "Loïe Fuller's serpentine dance is an emblem for the concord of the dream flowers drawn up in the movements of the veils and the new power of electricity."[13]

The American dancer was a major figure of 1900 Paris, and her shows were reviewed by the most illustrious critics and artists of her time (Stéphane Mallarmé, Roger Marx, Jean Lorrain, Camille Mauclair, Camille Flammarion, Rodin, to name a few). If the inspiration behind her Fullerian dances owes a lot to Art Nouveau, both in the themes and in the desire for disruption, it is because she wanted to capture and represent part of this modernity of the new century, by revolutionizing the codes of ballet and dance. In order to achieve this, Loïe Fuller imagined a luminous choreography. She experimented with the new technological possibilities offered by the invention of electricity and the research on colored perception. The various elements of her staging apparatus can be seen through her use of costumes, lighting and the decorative nudity of the stage. She created a costume, this long dress formed from several conical strips sewed together that enveloped her body. This skirt was set on a metallic circle adapted to fit her head. It dissimulated two bamboo sticks that the dancer agitated to elevate the dress, make the fabric swirl above her head and compose ornamental figures with her chromatic compositions. She also invented a new type of staging using optical illusions: the stage was lit from below using a system of colored electric lamps encrusted in the floor. Finally, she composed a naked type of theatrical decor: the white decor was adorned with white or colored facetted stones that produced a scintillating effect under light.

It is not surprising to find, in Roger Marx's exemplary forms of Social Art, Lalique's jewelry, the flower women of Jules Chéret's posters and Loïe Fuller's renovated dance.[14] At first, it was the changing instability of the gestures that seduced the critic's gaze when the dancer "wrap[ped] herself up in the soft fabric that lies against the body, marr[ying] the forms, shap[ing] the curve, and outlin[ing] the silhouette."[15] The veils that draped her became screens on which her dazzling metamorphoses could appear: the fabric showed movement in its continuity, by materializing "in a plastic form the optical phenomenon of the persistence of vision used in cinema."[16] Roger Marx described Loïe Fuller's unfound body, a silhouette that kept stealing away, circumventing its own shape. The serpentine dance invented by Loïe Fuller showed a luminous body that abolished the decor immersed in the dark and dismantled the hierarchy between the stage and the audience. As in a phantasmagoria and other spectral apparitions, the spectator's look was oriented by the colored spurts on her luminous body. The staging evicted narrative, a characteristic which has later been used in trick films and wonders of early cinema. The show was an art of movement, an ornament of time[17] in which "the drifting lines, the suppleness and mobility of shapes, the fluidity and abstract quality of motifs, the galloping and dynamic repetition of motifs ended up making a new form appear."[18] More than a dance movement, Loïe Fuller performed a routine of gestures producing different steps of a cinematic scene playing with light, movement and rhythm: on stage, Loïe Fuller was twisting and contorting herself, struggling energetically in the fabric that wrapped her from the feet to the neck and suggesting not only shapes with precise and identified contours but mostly the very idea of movement and rhythm. Roger Marx described her incessant transformations by evoking the lightness of the dragonfly, the jumping of the bird, the sliding of bats, all the fauna and flora of poetic comparisons. One can thus understand that the gusts of color that animated the veils of the dancer Loïe Fuller referred to what Roger Marx called "knick-knack poetry," to the curls of Émile Gallé's flasks, to the volatile jewels of René Lalique, to Antonin Daum's glasswork and to the first colored films and other colored posters that spangled the walls of the city. The serpentine dance refers first and foremost to a show of rhythmic metamorphosis that echoes the cinematic display and its variations presented during the Universal Exhibition, which has to be analysed within the aesthetic context of Art Nouveau.

Ornament, Serpentine dance and the cinematic promises

At the 1900 Exhibition, ornament met cinema. The latter was just arising within Art Nouveau, in this "era where art euphoria and industrial accomplishment [could] mix, because art [was] asserting itself as the pure production of world-events whereas industrial novelty [was] identified to the immaterial of electric power, of machines that x-ray bodies or those that fix shadows, enclose symphony in the furrows of wax or invent dream-like automated figures."[19] This is the hypothesis that Lucy Fischer defends in her recent book *Cinema by Design: Art Nouveau, Modernism and Film History*.[20] Lucy Fischer recounts the aesthetic and historic relations between the artistic movement of modernity and the history of cinema, by calling on to the notions of gender, exoticism and naturalism. She thereby tries to measure the aesthetic and ideological impacts of Art Nouveau on cinematographic productions, showing that, in truth, "Art Nouveau was born with film."[21] Quoting the specialist Klaus Jürgen Sembach, she explains their intrinsic coexistence: "the 1890's gave the world two innovations: cinema and Art Nouveau. […] [They] started from the same premises, their aims were comparable and they shared similar yearnings."[22] Through the industrial calling, the animation of movement and the fascination for glass' transparence and light effects, a formal dialogue between the dawning cinematographic show and Art Nouveau was installed that aimed at reunifying art, life and machinery. Ultimately, Art Nouveau as an artistic movement was absolutely contemporary with cinema, which was frequently called "the new art" as Lucy Fischer points out: "the emergent medium of film was labeled with the phrase 'new art' – an epithet identical to that which was affixed to a nascent modernist style."[23]

If many scholars have highlighted the importance of technology in the emergence of a modern sensibility of movement through research on Fuller's dances,[24] we must place more emphasis on the correlation with the cinematographic display and the connection with the visual culture of the late 20th century, which was influenced by Art Nouveau. Based on the hypothesis that Art Nouveau and cinema are not only linked but deeply intertwined during the 1900 Exhibition, this article intends to outline the relationships between the invention of the cinematographic display and Fuller's dances. While the links between design and film have sometimes been pointed out by the analysis of set design, particularly around the 1920s and the Art Deco movement,[25] the aesthetic issues of Art Nouveau in relation to the emergence of cinema have rarely been studied, as Lucy Fischer states in the introduction to her book.[26] It seems that this absence of Art Nouveau in the field of cinematographic studies can be explained by the powerful rejection of the ornamental forms that characterize the movement, a criticism of ornament that has been asserted to its highest point in modernity. Without going into the specific issues of a long dispute over ornamental forms, it should nevertheless be stressed that Art Nouveau is part of a "end-of-the-century" aesthetic, as the product of a decadent taste and excessive sensitivity. Minor, exotic, feminine: the anti-ornamental discourse irrigates artistic production and the early cinema will soon respond to the anti-decorative imperative, even though it was born precisely at the highpoint of Art Nouveau. There is therefore an unresolved paradox that informs the relationship between Art Nouveau, cinema and ornamentation: from the movie theatres with their grandiloquent architecture, to the abundant sets of early cinema and the costumes and artifacts displayed in Méliès' fairy tales and other magicians of the screen, ornament seems to be everywhere. However, the modernist discourse will gradually relegate ornament to the margins of artistic creation, or even demonize it to promote a "refined" taste for the simple forms that oppose the floral arabesques of Art Nouveau.[27] Lucy Fischer clearly states this paradox about Art Nouveau ornament in 1900: "While Art Nouveau's curves were graceful; their overlapping, interlocking swirls could also connote perversity and entrapment – indicative of the movement's 'bipolar' sensibility."[28] This ornamental rejection is symptomatic of the critical discourse about ornament, if we think for example of the pages that Walter Benjamin devoted to Art Nouveau, the ornament being the manifestation of a "bourgeois" culture, associated with the domestic space, the market value and to a representation of an infertile femininity.[29] But the fascination that serpentine dance exerts on Parisian spectators during the exhibition can be explained, if we are to believe the commentators of the time, by the invention of a spectacular new form that combines art and technique with the ornamental forms of Art Nouveau. An equation whose terms were repeated, at the same time as the beginning of cinema, which will soon be criticized by the modernist discourse.

In bringing up "her old souvenirs," Germaine Dulac told the story of her intrusion in the music-hall room. Her "age forbade her [the] entry," but she snuck in to see what the Paris smart set was talking about, to see the woman who danced with light with her "white veils whose lightness, malleability and mobility [brought] to mind flowers and butterflies" and her "spotlights with multicolor rays that [painted] gleaming scales on the moving whiteness of gauze": "an invisible body melted into diaphanous fabric from which emerged a head… a brain carried by light."[30] Germaine Dulac saw here the foreshadowing of what she called "visual music."[31] She pointed out the exact simultaneity between the first luminous harmonies of the serpentine dance and the birth of cinema; as if this "strange coincidence" was a sign of the upcoming integral cinema. The serpentine dance, as developed by its numerous imitators, heralded the birth of cinema through its ornamental dynamic. Cinematographic production was to grasp this very dynamic, as well as multiply tricks and light effects, highlighted by color. The scenic space was conceived as a moving chromatic board "that wanted nothing from the energy of cinematographic images."[32] However, Loïe Fuller does not appear in any of the movement strips of the serpentine dance that we have now. The serpentine dance that became an incarnation of Art Nouveau and outshone all of the ancient forms of serpentine figures maintained a relation of proximity with cinema that was never to be truly brought to life by the dancer herself. Indeed, she believed that the cinematographic image could only produce an ersatz of her scenic experimentations and refused to transpose her dances onto the screen. Cinema was for her a "medium that froze the apparition of light, that exhausted creation as a living act."[33]

As opposed to Loïe Fuller's statement about the new cinematograph, Jessie Martin examined precisely how serpentine dance was particularly well suited to film screening in early cinema. Among the first hand-painted films were many serpentine dances, as shown by the successive variants of an Annabelle Serpentine Dance (William K. L. Dickson, Edison Manufacturing Company, 1894). For nearly a minute, American actress Annabelle Withford Moore performed the famous serpentine dance invented by Loïe Fuller and imitated by many dancers around the world. What cinema manages to reveal in the cinematographic movement are the whirlwinds of colors of serpentine dance: whereas on stage, they were prismatic reflections of colored lights that were projected onto the ample veils of a dancer's dress; in cinema, the iridescence of colors came from hand-colored practices, which offered to the eye various transitions of all the nuances of the color spectrum. It should be noted that "the mobility, not to say the instability, of the colors of the original scene somehow justified the inaccuracies in the application of the colors on film that reproduced it."[34] This proximity between art and technique that links cinema to the serpentine has also been pointed out by Laurent Guido:

> *Despite its shortcomings compared to the innovating potential of the serpentine, the cinematographic medium would go on to maintain underlying, implicit yet truly important relations with Fuller's aesthetic. This idea is widely acknowledged by Fullerian historiography. It is based on a common shift according to which the "affinities" between cinema and Loïe Fuller's shows must be understood, not without a teleological or at least essentialist detour, rather through the artistic potential of these two forms of expression than in the reality of their common conditions in 1900.*[35]

Laurent Guido thus predicates a common destiny between cinema and Loïe Fuller's scenic device that will only be fulfilled during the avant-gardes of the 1910s, through the abstraction of animated cinema or futurist cinema. Perhaps early cinema failed at representing the kaleidoscopic effects of colored rhythm the way Loïe Fuller did. However, it seems that hand-coloring, which characterizes the cinema of attractions through the projective and carnal dimensions of ornamental color, allowed us to catch a glimpse of what could have been a cinematographic transcription of the serpentine dance. This is what Art Nouveau sculptors and decorators have tried to convey by using glass paste and almost translucent fine porcelain. This diaphanous light caught between opacity and transparency is both characteristic of the work on precious stones and art pieces, as well as cinema. Thus, it appears that ornament, Art Nouveau and cinema are bound together in this historical and aesthetic context of Paris 1900: Loïe Fuller's work would be a specific example of a broader framework that ties the so-called "Decorative Arts" and Cinema together, which remains to be thoroughly explored.

Illustrations

4. *Electricity Palace at the Paris 1900 Exhibition*, 1900, photographic print, 20 x 28 cm. Copyright Brown University.
5. Henry Sauvage, *Projet du Théâtre Fuller*, "Revue des Arts Décoratifs, 1900," p. 343. Copyright Bibliothèque Nationale de France.
6. *Loie Fuller, full-length portrait, standing, facing front; raising her very long gown in shape of butterfly*, c. 1902, photographic print by Frederick Glasier. Copyright Library of Congress.

Notes

[1] Christophe Prochasson, *Paris 1900, Essai d'histoire culturelle*, Calmann-Lévy, Paris 1999, p. 93. (All translations by Justine Granjard and Éline Grignard).

[2] Giovanni Lista, *Loïe Fuller danseuse de la Belle Époque*, Hermann, Paris 2006, p. 299.

[3] Christophe Prochasson, *Paris 1900, Essai d'histoire culturelle*, cit., p. 101.

[4] Emmanuelle Toulet, "Le cinéma à l'Exposition Universelle de 1900," in *Revue d'histoire moderne et contemporaine*, April-June 1986, p. 179.

[5] Christophe Prochasson, *Paris 1900, Essai d'histoire culturelle*, cit., p. 104.

[6] "Le corps charmait d'être introuvable," in Georges Rodenbach, "Danseuses," in *Le Figaro*, 5 May 1896, quoted in Jacques Rancière, "La danse de lumière," *Aisthesis, Scènes du régime esthétique de l'art*, Galilée, Paris 2011, p. 123.

[7] Giovanni Lista, *Loïe Fuller danseuse de la Belle Époque*, cit., p. 299.

[8] *Idem*, p. 300.

[9] Jules Trousset, *Les Merveilles de l'Exposition de 1900*, Montgrédien, Paris 1899, vol. II. Quoted in Emmanuelle Toulet, "Le cinéma à l'Exposition Universelle de 1900," cit., p. 180.

[10] Giovanni Lista, *Loïe Fuller danseuse de la Belle Époque*, cit., p. 323.

[11] Jean-Baptiste Minnaert, "Henri Sauvage et le théâtre de Loïe Fuller," in *Loïe Fuller, Danseuse de l'Art nouveau* (cat. exp.), Rmn, Paris 2002, p. 59.

[12] *Idem*, p. 25.

[13] *Idem*, p. 174.

[14] Roger Marx, *L'Art social*, E. Fasquelle, Paris 1913.

[15] Roger Marx, "Une rénovatrice de la danse," in *L'Art social*, cit., p. 214.

[16] Jean-Baptiste Minnaert, "Henri Sauvage et le théâtre de Loïe Fuller," cit., p. 22.

[17] Hélène Pinet (ed.), *Ornement de la Durée, Loïe Fuller, Isadora Duncan, Ruth St. Denis, Adorée Villany* (cat. exp.), Musée Rodin, Paris 1987.

[18] *Idem*, p. 116.

[19] *Idem*, p. 136.

[20] Lucy Fischer, *Cinema by Design, Art Nouveau, Modernism, and Film History*, Columbia University, New York 2017.

[21] *Idem*, p. 30. Quoted in Debora Silverman, *Art Nouveau in Fin-de-Siecle France: Politics, Psychology and Style*, University of California Press, Berkeley 1989, p. 8.

[22] *Ibidem*.

[23] Lucy Fischer, *Cinema by Design, Art Nouveau, Modernism, and Film History*, cit., p. 31.

[24] Rhonda K. Garelick, *Electric Salome: Loie Fuller's Performance of Modernism*, Princeton University Press, Princeton 2007. Ann Cooper Albright, *Traces of Light: Absence and Presence in the Work of Loïe Fuller*, Wesleyan University Press, Middletown (CT) 2007.

[25] Lucy Fischer, *Designing Women: Cinema, Art Deco, and the Female Form*, Columbia University Press, New York 2003.

[26] "My hunch about Art Nouveau and film followed from my prior work on Art Deco and the cinema (a bond that has been more established in film studies). I thought to pursue the study of design and film one generation further back – to the turn of the century. However, in searching the indexes and tables of contents of countless volumes on the subject, I found only a scant mention of Art Nouveau," in Lucy Fischer, *Cinema by Design, Art Nouveau, Modernism, and Film History*, cit., p. 1.

[27] Cf. Teresa Castro, "Les couleurs ornementales du cinéma des premiers temps," in *1895, Le cinéma en couleurs*, AFRHC, no. 71, Winter 2013, pp. 19-29.

[28] Lucy Fischer, *Cinema by Design, Art Nouveau, Modernism, and Film History*, cit., p. 7.

[29] Cf. Walter Benjamin, "Paris: Capital of the Nineteenth Century," in *Perspecta*, vol. 12, 1969, pp. 165-172. Lucy Fischer, *Cinema by Design, Art Nouveau, Modernism, and Film History*, cit., pp. 20-22.

[30] Germaine Dulac, "Trois rencontres avec Loïe Fuller," in *Écrits sur le cinéma (1919-1937)*, Éditions Paris Expérimental, Paris 1994, p. 109.

[31] Germaine Dulac, *Écrits sur le cinéma (1919-1937)*, cit.

[32] Giovanni Lista, *Loïe Fuller danseuse de la Belle Époque*, cit., p. 11.

[33] *Idem*, p. 353.

[34] Jessie Martin, *Le Cinéma en couleurs*, Armand Colin, Paris 2013, pp. 11-12.

[35] Laurent Guido, "Entre spectacles paradoxaux et dispositifs techniques: retour sur les danses serpentines du premier cinema," in Gilles Mouëllic, Laurent Le Forestier (eds.), *Filmer l'artiste au travail*, Presses universitaires de Rennes, Rennes 2013, p. 127.

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Moving Image – Moving Nation: Exhibiting Italy at the International Cinematographic Contest of Turin 1911 World's Fair

Introduction

The relationship between Cinema and Nation has been looked at and analysed at length.[1] On one hand, scholars have looked at how cinema shaped the image of nations; on the other hand, at how national powers used cinema as a mean of propaganda for citizens. The reciprocity between the two levels is evident and it discloses the interconnection between the dimensions of politics, artistic production, industry, promotion, consumption and reception. Throughout this paper, I would like to consider the interaction that occurs between these two main objects through the lens of the specific case study of the *Premio Concorso Internazionale di Cinematografia* organized during the 1911 International Exposition in Turin (Italy).[2] The specificity of the case allows us to grasp the complex relationship between nation and cinema, disclosing multi-layered agendas behind the event. Moreover, it shows in which way the "exhibitionary complex"[3] cooperated to tie together cinema and nation, aiming at the construction of a shared and persuasive celebratory discourse.

Italy 1911

1911 was a crucial moment for Italian history. It marked the 50th anniversary of the Italian Unification and it represented an important occasion of legitimation both from a national and an international perspective.[4] In the international arena, Italy wanted to demonstrate that, although a latecomer, it could stand next to other important European powers and, in this same year, it began the colonial campaign for the conquest of Libya. Within the national territory, the anniversary became a way of proclaiming the existence of a shared identity, a topic which represented a fundamental issue for the country.

Post-unitary Italy based its identity on the narration of the Independence wars and the Risorgimento, depicted as a moment of re-birth for the Italian people who drew strength from the idea of one united nation-State and the expulsion of the numerous territorial dynasties governing the peninsula. Despite the rhetoric, the Independence process was characterized by strong contradictions: the lack of a common language, the social, cultural and economic dissimilarities among the regions, the different conceptions on the final political outcome.[5] Fifty years later, a conciliatory representation of the role of the Savoy dynasty and the northern liberal class, as leaders of the country in the unification process, needed to be designed.

In a joint effort, the mayors of Rome and Turin, with a consistent private participation, decided to organize two parallel programmes within the formula of the International Exposition, in order to show how and how much Italy had developed in these fifty years.[6] The events were split between the two cities to narrate two distinctive features: Rome should represent the conceptual spirit of the nation through a fair centred on arts, archaeology and ethnography. Turin was instead associated with progress, science, and industry which were seen as the physical results of the cultural tradition. In this way, the exposition stressed the link between Rome, the actual capital city and origin of the Roman Empire, and Turin, former capital (1861-1865) and headquarter of the Savoy dynasty. By contrast, this doubling also disclosed a problem of identity and power recognition, pointing out the disputes around who should be entitled to represent the nation. Moreover, the initial exclusion of Florence (capital from 1865 to 1871) as a third pole of the Exposition emphasizes such a problem.[7]

The International cinematographic contest

In 1911, Turin was celebrated as the modern city, a capital of technology able to compete with other European metropolises. The location of the exhibition was a large area consisting of the Valentino Park, a green space within the city centre that had already hosted numerous national exhibitions.[8] A second part was hosted in the Pilonetto, on the East side of the Po river.

As part of the Turin fair an international cinematographic contest was organized, the *Premio Concorso Internazionale di Cinematografia*.[9] The jury was composed (among others) by Louis Lumière and Paul Nadar, showing the will of the organizers to legitimate the project through the French leading figures in industrial cinema and photography. The contest was divided into three categories: artistic, scientific and didactic films.[10]

This tripartition is already telling: the separation between artistic and scientific reveals a moment of passage of Italian cinema history, when cinema started to become mainly a narrative and entertaining tool, rather than a device for the production of knowledge. However, the fact that such a contest was not part of the Roman but of the Turinese fair still highlighted the value of cinema as industry and scientific enterprise, rather than as artistic means of expression. Within the fair taxonomy, cinematography was placed under the many applications of photography "not only [as an] end in itself, but especially as aid for science and industry."[11]

The presence of a didactic category is an interesting novelty: a similar section was present in the 1909 Milanese contest, where for the first time awards were included for films with moral or religious subject matter.[12] A reference to this educational use of cinema as an "omni-potent tool of future culture"[13] can be found in many quotations of the time. Journalists put a lot of emphasis on the importance of producing films with an educative purpose for the illiterate masses and for the benefit of the entire culture.

> *These contests are not only useful to demonstrate the intensity and the industrial and commercial activity of cinematography, but they serve a higher purpose: they expand the human thought and the beauty of all the regions, they show how much Cinematography can influence the instruction and the costume of people.*[14]

The pairing of Cinema-Education was officially recognised and promoted by both public media and institutions. The political preoccupation for the creation of a shared cultural background led to the development of a number of local and national initiatives, with the aim of promoting film showings in particular for young children in school and educational spaces. For example, the funding of scholastic cinematography in Southern Italy or in the Municipality of Rome (both in 1909), or the foundation of the *Consorzio Nazionale Biblioteche e Proiezioni Luminose* (led by private initiatives in Turin in 1909) and the *Istituto Nazionale «Minerva»* (an institutional and public body, inaugurated in 1911 under the Ministry of Education and Fine Arts).[15]

> *The [cinematographic] representation of any big historical events from any time and any place […] attracts the youngsters' attention and impresses in their malleable soul a lasting sign, more than if it was narrated from a speech. The learning struggle gets lighter and study seems leisure time […] With words or drawings is not the same… you will make the happiness of the kids if you show these images in school, and they will learn better and faster than from a lesson or a book.*[16]

The author here seems to attribute a leading role to historical movies, a propensity that is reflected also in the contest itself.

The contest, although open to an international attendance, saw the participation of only Italian production companies. Merely six movies were presented, produced by four production houses.[17] At the premiere, *Nozze d'oro* directed by Luigi Maggi (Ambrosio), *Il poverello di Assisi* by Enrico Guazzoni (Cines) and *L'Odissea* by Francesco Bertolini and Adolfo Padovan (Milano Films), won respectively the first, second and third place in the artistic section. The scientific award went to *La vita delle farfalle*, directed by Roberto Omegna in collaboration with the writer Guido Gozzano (Ambrosio). *Il tamburino sardo* by Umberto Paradisi (Cines) succeeded in the didactic category.[18]

The fiasco was probably the result of both bad management and short notice for the production of movies. In the specialized journals, disapprovals came from the *Cine-Fono*, while the *Rivista Cinematografica* congratulated the organizer for the accomplishment. Clearly, the opposite comments mirrored the regional dimension and the power influences. On one side, *Rivista Cinematografica* from Turin praised the results of the civic events. More than the contest in itself, Ambrosio and the success of his production house were the central topic of the article. According to the writer, the non-participation of international production houses was not a weak point, but the sign of fear for the shining vigour of an Italian cinema that stood out in the global arena.[19] On the other hand, *Cine-Fono* from Naples denounced the lack of transparency and the parochialism in the prize-giving process.[20]

The historical movies

Moving away from considerations on the thinly concealed failure of the contest, what is highly significant in light of the connection between cinema and nation are the subjects of the participating movies. Three of them revisited a historical and national subject: *Nozze d'oro* is a fictional story about the Battle of Palestro (1859); *Il tamburino sardo* took inspiration from a Risorgimento episode narrated in the novel *Cuore* by Edmondo De Amicis, while *Il poverello di Assisi* refashioned the hagiographic tradition.[21]

The historical subject matter appeared through the cinematic medium to be a privileged narration for the national celebration.[22] The construction of history was at the core of the political agenda, and Ministries financed cinematographic contests to spread a moving (in both sense) image of the Nation.[23] In particular, the use and manipulation of the myth of the Risorgimento saw a sort of revival in these years.[24]

A crucial example is represented by *La presa di Roma* (1905), which is also considered the first film industrially produced in Italy.[25] Many other silent films with patriotic subjects were produced (forty-four from 1905 to 1915, with a peak of seven movies during 1911),[26] with the aim of building a national consciousness, offering a harmonized view of the independence war.

One recurrent feature of such visual narratives was the reference to key heroic figures inserted in the accounts of ordinary people's life. In this way, the process of crystallization of the Risorgimento pantheon went hand in hand with the promotion of positive conducts to be spread and followed by common Italian citizens. The most democratic and subversive feelings associated with the Independence wars were weakened and the ideological subjects were neutralized. The image that was offered was of a glorious nation composed of obedient citizens.

Nozze d'oro[27] is highly significant: an old couple is celebrating fifty years of marriage and the patriarch starts to narrate the story of their first meeting, during the Risorgimento Battle of Palestro. Through the parallelism between the anniversary of the national unification and the one of the married couple, the interconnection between family and nation is made evident.[28] A typical rhetorical tool of the patriotic discourse was the idea of nation as a community of descendants and the link between nation and family occurs in the reference to blood, brotherhood, sons of the nation, homeland as mother.[29]

Lineage also meant succession of generations and transmission of stories and histories. The old patriarch as a narrator was the sign of the passage from the generation of the Risorgimento to a new one, that had to remember the past, to be proud of its ancestors and to enhance patriotic feelings.[30] Moreover, this choice reveals the fact that, since the generation of Risorgimento was ceasing to exist, it was possible to put an end to the political battle over the Independence memory and its inheritance, and to build a controlled and pedagogical interpretation of the past.[31]

In this way, the political was transferred into the domestic[32] and the two spaces were clearly represented in the movie by the shift back and forth from bourgeois interior of the family house (fig. 7) to the battlefield. Within this frame it is not surprising that the private story of the simple *bersagliere* intersected with the official national history and crosses central figure such as the King Vittorio Emanuele II. In fact, they were both seen as part of the same narration, where the royal family represented the highest level of intersection between blood relationship and State.

The gendered dimension was also evident, displayed in a set of precise roles: the man is the one who speaks and acts, the wife is listening and crying. However, only through the participation of the entire society in the independence movement was it possible to gain freedom. The blood of the Italians was not only the blood of the male army, but also of the women who inspired and sustained them with courage.[33] This was represented in the scene of the female farmer who secretly cuts her wrist in order to explain to the Austrian captain why she has a blood spot on her shirt. The blood was actually coming from the wound of the Italian soldier that she was protecting and hiding (fig. 8).[34]

An interclassist picture was also drawn. The Risorgimento was represented as a moment of interaction and encounter between different social strata, the humble farmer and the soldier. While in 1911 socialism and strikes threatened the order of society,[35] a conciliatory effort was made in the movie, depicting the triumph of the assimilation in the image of the harmonious, patriotic and bourgeois family.

Another telling choice was the one of the Battle of Palestro (1859), during which the Italians fought against the Austrians with the support of the French Zouaves troops.[36] In 1911 the Italian state started to have a close relationship with France, which sustained the Libyan campaign. France also had an important role within the Turinese expo and was the only state represented by two pavilions. Therefore, the production wanted probably to please the neighbour State. Moreover, the reference to Zouaves as ally offers a reconciled view of the interaction between empire and colony.

Il tamburino sardo[37] continued in the line of the previous film. Again, the subject is the Risorgimento, once again seen from the point of view of a common participant. In this movie, that won the didactic category, cinema interacted with children's literature. In fact the episode was taken from the book *Cuore* written by Edmondo De Amicis in 1886.[38] The book was precisely written for the pupils of the new national school system and offers a series of positive models to the readers, with young boys as protagonists.[39] Once again, the generational gap was filled by educating the new generation about the past glory by feelings of personification. In this short story, a drummer boy helps the Italian troops attacked by Austrians, risking his life to deliver a message to ask for military reinforcement. In the final clip, the Captain of the rescued troop goes to the hospital and finds the drummer boy with an amputated leg. The sacrifice for the nation is represented as the highest sign of love, and military pride replaced the tragic feelings for the boy's destiny with the promise of future glory.[40] The drummer's strongest feeling seems not to be pain but the excitement of being treated as a hero.

The movie closes with a strong reference to the tricolour flag, one of the most powerful symbols of the Italian nation,[41] which "flies furtively in the blue thanks to the hope of the patriots who safeguard it in their sacrarium" (my translation). Again, the nation is an emotional subject, first realized as an "imagined community" in the inner private body and later in the outside public world.[42]

In *Il poverello di Assisi*,[43] given the religious subject, the relationship with the national identity could seem less evident. However, the movie relates to other important symbols.[44] First of all, there was the reference to the Middle Ages.[45] Gothic revival characterized the 19th century everywhere in Europe and in many cases the Middle Ages provided the basis for the legitimation of national autonomy. In particular, Italy projected an important foundation myth on that past historical moment, which better than other periods could serve to describe one fundamental characteristic of the country: its regionalism. The coexistence of a plurality of local traditions, condensed in the complex system of the cities, characterized by specific *libertas* and a degree of independence from the central power of the Empire and the Church, was seen as a traditional and constitutive element of the land that should be preserved as such. Medieval times became one of the main historical lenses through which Italy appropriated the concept of nation, and its cinematic fortune was evident until the fascist period.[46]

The figure of St. Francis embodied, another central issue: the language. Represented in the movie while he declaims the Canticle of Creatures to his disciples, St. Francis is considered the initiator of Italian vernacular literature. Moreover, the stylistic choice of the movie recalled the Giottesque pictorial tradition, considered the origin of the Italian painting school and an anticipator of the Renaissance. A great deal of attention was given to the artistic features of the movie that represented Italy as the land of poetry, arts and spiritual values. Christianity was clearly another key element. Religion had a clear and strong impact on the education of Italian people and the lay State had to learn a lot from its capacity to involve a community around the sphere of feelings and belief.[47] If the first decades of the Italian unification were characterized by strong disputes between the lay state and the Church, who in Rome prevented the union of northern and southern Italy, the beginning of the 20th century marked a moment of rest, moving toward a compromise.[48] Therefore, St. Francis could be used as a sort of joint that fixed the break between the two powers, in the past and in the present. In an article of the Official Guide celebrating precisely the highly significant event of the conquest of Rome, the saint is even listed among the national lay hero as the first person who understood the proper separation of power between the temporal state and the spiritual church.[49]

Conclusions

The three movies presented in the article were three isolated choices of production houses and directors. However, when inserted within the original context of their production, they acquire new meaning and become part of a wider system where their celebratory nature emerges more clearly. What comes out is the effort of each movie to magnify Italy in different but parallel ways. *Nozze d'oro* put at the core the Risorgimento and the link between nation and family; *Il tamburino sardo* took the point of view of a young boy from the novel *Cuore*, narrative pillars of the national educational system; *Il poverello d'Assisi* looked at a religious subject and erect it as bearer of some peculiar traits of italianity. Even the failure of the contest transformed the event that became, instead of a moment of international competition, a theatre for national exhibition and local rivalry. The city of Turin, as the main organizer, used the event to show the quality of its cinema, and Ambrosio seized the moment. The excellent reception and distribution of *Nozze d'oro* abroad is also a sign of how much Italian cinema started to be launched in the international panorama, at the beginning of its golden period.

Putting together the message of the singular movies and the three broad objects analysed (nation, cinema and exhibition) manifold connections arose. The Italian nation played the role of the legitimizing authority, even if the State was not the actual promoter of the event. In fact, the national anniversary represented the *raison d'être* of the entire event and acts as a background that changes the landscape of the whole exhibition. The set of the exhibition in the city of Turin provided the actual and symbolical space. Cinema was part of this system as a sort of mirror: through the screen, it projected upon the viewers a dignified image of the nation with a double tension. On one hand, the representation was built upon the celebration, on the other, it meant to build a sense of community. The movies should enhance positive identity feelings in the Italian spectators, while they should infuse sympathy and trustworthiness in the foreign public. In a circular dependency, the context of the world's fair triggered the apparatus of memorialisation and offered the nation to a public of viewers as a cinematic spectacle.

Illustrations

7. Alberto Capozzi, Mario Voller Buzzi, Mary Cléo Tarlarini, Norma Rasero and Maria Bay in *Nozze d'oro* (Luigi Maggi, 1911), Film still, gelatin silver print, 13x18 cm (F11454/001 Ambrosio Fonds, Archives of the National Cinema Museum, Torino).
8. Mary Cléo Tarlarini and Giuseppe Gray in *Nozze d'oro* (Luigi Maggi, 1911), Film still, gelatin silver print, 13x18 cm (F11454/006 Ambrosio Fonds Archives of the National Cinema Museum, Torino).

Notes

[1] Just to mention some key contributions in regards to silent cinema, for an international insight see: Richard Abel, Giorgio Bertellini, Rob King, *Early Cinema and the "National"*, Libbey, New Barnet 2008. For the Italian case: Lucio Villari, Mario Musumeci, Sergio Toffetti, *Da* La presa di Roma *a* Il piccolo garibaldino*: risorgimento, massoneria e istituzioni: l'immagine della nazione nel cinema muto (1905-1909)*, Gangemi, Roma 2007.

[2] The contest has not been studied in detail except for the master's thesis by Gabriele Perrone in 2011. His work retraces the origin and the organizational context; it offers, moreover, an analysis of the restoration of three award-winning films. Gabriele Perrone, *Esposizione di Torino 1911 - Il Concorso Cinematografico dell'Esposizione. Il restauro di* Nozze d'oro*,* La vita delle farfalle *e* Il tamburino sardo, Torino Università degli Studi (MA Thesis), 2011. See also Gabriele Perrone, "Le 'Nozze d'oro' della 'Ambrosio', dal concorso cinematografico del 1911 al restauro del 2011," in *Immagine. Note di Storia del Cinema*, no. 3, IV series, January-July 2011, pp. 135-151, and Aldo Bernardini, *Cinema Muto Italiano. 3: Arte, divismo e mercato, 1910-1914*, Laterza, Roma 1982, pp. 54-62.

[3] This expression is taken from Tony Bennett, "The exhibitionary complex," in *New Formations*, no. 4, spring 1988, pp. 73-102.

[4] On the significance of the 1911 World's Fair see: Stefania Massari (ed.), *Il fatale Millenovecentoundici. Le esposizioni di Roma, Torino, Firenze*, Palombi, Roma 2012. More specifically about Italian cinema in 1911 see: *Immagine. Note di Storia del Cinema*, no. 3, IV series, January-July 2011.

[5] For a detailed study on the rhetoric tools of identity making in Italy see Alberto Mario Banti, *Sublime madre nostra. La nazione italiana dal Risorgimento al fascismo*, Laterza, Bari 2014 and Id., *La nazione del Risorgimento. Parentela, santità e onore alle origini dell'Italia unita*, Einaudi, Torino 2000.

[6] Stefania Massari, *Il fatale Millenovecentoundici. Le esposizioni di Roma, Torino, Firenze*, cit., p. 7

[7] Florence was integrated later, with a program on arts and horticulture: *Ibidem*.

[8] On the relevance of the expositions organized in Turin see Cristina Della Coletta, *World's Fairs Italian Style: The Great Exhibitions in Turin and Their Narratives, 1860-1915*, University of Toronto Press, Toronto 2016. Other useful information on the fair can be found in Piergiorgio Balocco, *L'Esposizione Internazionale di Torino del 1911*, Graphot, Torino 2011. Albina Malerba, Pier Luigi Bassignana, Gustavo Mola Di Nomaglio, *Torino internazionale: le grandi expo tra Otto e Novecento*, Consiglio regionale del Piemonte, Torino 2015. See also http://www.italyworldsfairs.org (last visit 19 October 2018) for information and historical materials.

[9] A first international contest was organized in Milan in 1909, entitled *Primo Concorso Mondiale di Cinematografia*. M. Montericcio, *Il concorso cinematografico di Milano del 1909*, in Raffaele De Berti, Elena Mosconi (eds.), *Il cinema delle origini a Milano, 1895-1920*, Vita e Pensiero, Milano 1994, pp. 423-429; Giovanni Lasi, *La produzione cinematografica nel sistema economico-industriale italiano tra il 1908 e il 1914. Il caso della Milano Films*, Università degli Studi di Bologna (PhD thesis), 2012.

[10] The rules were at first published in *Giornale ufficiale illustrato dell'Esposizione Internazionale delle Industrie e del Lavoro*, August 1910, p. 1. Gabriele Perrone, *Esposizione di Torino 1911 - Il Concorso Cinematografico dell'Esposizione. Il restauro di* Nozze d'oro*,* La vita delle farfalle *e* Il tamburino sardo, cit., pp. 35-42.

[11] "La Grande Mostra di Fotografia," in *Giornale ufficiale illustrato dell'Esposizione Internazionale delle Industrie e del Lavoro*, July 1910, p. 1 (my translation).

[12] Gabriele Perrone, *Esposizione di Torino 1911 - Il Concorso Cinematografico dell'Esposizione. Il restauro di* Nozze d'oro*,* La vita delle farfalle *e* Il tamburino sardo, cit., pp. 23-27.

[13] "Cinematografia didattica," in *La cinematografia italiana ed estera*, V, no. 97, 1-5 January 1910, p. 1117. From Silvio Alovisio, *La scuola dove si vede. Cinema ed educazione nell'Italia del primo Novecento. Con una antologia di testi d'epoca*, Kaplan, Torino 2016, pp. 14-15 (my translation).

[14] Luigi Marone, "Concorsi di cinematografia," in *Cine-Fono*, no. 125, 17 September 1910, pp. 9-10. From *Idem*, p. 25 (my translation).

[15] Silvio Alovisio, *La scuola dove si vede. Cinema ed educazione nell'Italia del primo Novecento. Con una antologia di testi d'epoca*, cit., pp. 47-48 and 359-360.

[16] Michele Mastropaolo, "Il cinematografo e la scuola. Intervista col prof. Fornelli," in *Lux*, 3, 1909, pp. 6-7. Quoted from Silvio Alovisio, *La scuola dove si vede. Cinema ed educazione nell'Italia del primo Novecento. Con una antologia di testi d'epoca*, cit., pp. 153-154 (my translation).

[17] Società Anonima Ambrosio (Turin); Cines (Rome); Milano-Film (Milan); Pettine (Milan).

[18] The awards were the following: artistic category*:* 25.000 lire - 4.000 lire - 2.000 lire. Scientific and didactic category: 5.000 lire. The only excluded movie was: *Bellezze e ricordi d'Italia* (Pettine), a shot from real of the Italian beauties.

[19] "Dopo il concorso," in *La Vita Cinematografica*, no. 18, 1911, pp. 1-2.

[20] "Il concorso nazionale cinematografico di Torino," in *La Cine-Fono & la Rivista Fono-Cinematografica*, no. 171, 1911, pp. 5-6. Interestingly, the contest is here labelled as "national" instead of "international."

[21] In order to be consistent with the main topic of the paper, I am not going to discuss here the two non-historical movies: *Odissea d'Omero* and *Vita delle farfalle*, although they arise other interesting questions. For example, the connection between scientific visual representation and poetical representation (in the case of Guido Gozzano's participation to the script of *Vita delle farfalle*), or the role and fortune of epic movies in Italy (for *Odissea d'Omero*). Further information can be found in Vittorio Martinelli, Aldo Bernardini, *Il cinema muto italiano. I film degli anni d'oro; 1911*, vol. 2, Nuova ERI, Torino 1996.

[22] Giuliana Muscio, *In Hoc Signo Vinces: Historical Films*, in Giorgio Bertellini (ed.), *Italian silent cinema: a reader*, Libbey, New Barnet 2013, pp. 161-170.

[23] During the Milanese contest of 1909 there was even a specific category dedicated to "Movie with historical subjects, able to ignite the passion of the people to eminent feelings of patriotism, generosity, piety" (my translation). Quoted from Giovanni Lasi, *L'immagine della nazione: da «La presa di Roma», a «Il piccolo garibaldino»*, in Mario Musumeci, Sergio Toffetti (eds.), *Da* La presa di Roma *a* Il piccolo garibaldino*: risorgimento, massoneria e istituzioni: l'immagine della nazione nel cinema muto (1905-1909)*, Gangemi, Roma 2007.

[24] Roberto Balzani, *Il Risorgimento nell'Italietta*, in *Idem*. In 1906 the National Committee and the Society for the History of Risorgimento were founded.

[25] For details see: Michele Canosa (ed.), *La presa di Roma: alle origini del cinema italiano*, Le Mani, Recco 2006; Giovanni Lasi, *La presa di Roma 20 Settembre 1870 (Filoteo Alberini, 1905): la nascita di una nazione*, Mimesis, Udine-Milano 2015.

[26] A detailed filmography is provided in Giovanni Lasi, Giorgio Sangiorgi (eds.), *Il Risorgimento nel cinema italiano: filmografia a soggetto risorgimentale 1905-2010*, Edit Faenza, Faenza 2011. See also Giovanni Lasi, *Lo schermo della patria. 1905-1918: il Risorgimento nel cinema muto italiano*, in Vinzia Fiorino, Gian Luca Fruci, Alessio Petrizzo (eds.), *Il lungo Ottocento e le sue immagini: politica, media, spettacolo*, ETS, Firenze 2013, pp. 239-254.

[27] English title: *Golden Wedding* (USA) or *After Fifty Years* (UK). The movie was directed by Luigi Maggi and dramatized by Arrigo Frusta, *Società Anonima Ambrosio*. Vittorio Martinelli, Aldo Bernardini, *Il cinema muto italiano. I film degli anni d'oro; 1911*, vol. 1, Nuova ERI, Torino 1996, pp. 20-26.

[28] On the interconnection between family, nation and educative function see Ilaria Porciani, *Famiglia e nazione nel lungo Ottocento*, in Id. (ed.), *Famiglia e nazione nel lungo Ottocento italiano: modelli, strategie, reti di relazioni*, Viella, Roma 2006, pp. 15-53.

[29] Alberto Mario Banti, *Sublime madre nostra. La nazione italiana dal Risorgimento al fascismo*, cit.

[30] Interestingly other two movies adopted the same narrative strategy in a five-year period: *Il racconto del nonno*, 1910 (Milano Films) and *La lampada della nonna*, 1913 (Ambrosio). Giovanni Lasi, *Il Risorgimento nel Cinema Italiano*, in Giovanni Lasi, Giorgio Sangiorgi

(eds.), *Il Risorgimento nel Cinema Italiano*: *filmografia a soggetto risorgimentale 1905-2010*, cit., pp. 17-32.

[31] Roberto Balzani, *Il Risorgimento nell'Italietta*, cit.

[32] Ilaria Porciani, *Famiglia e nazione nel lungo Ottocento*, cit.

[33] *Ibidem*.

[34] A still from this sequence was readapted as an illustration for the advertising poster of the movie, a sign of the significance and narrative power of the scene. This poster, together with other pictures and archival materials from the movie can be found in the website of Museo Nazionale del Cinema http://www2.museocinema.it/collezioni/Muto.aspx, last visit 19 October 2018.

[35] As well as the success of the fair itself, "Lo sciopero all'Esposizione," in *Rivista delle Esposizioni*, no. 10, March 1911, p. 5.

[36] Precisely for the changing diplomatic relationship between Italy and Austria (the countries were historical enemies during the Independence wars, then allied from 1882 in the Triple Alliance, abandoned by Italy in 1915), the movie underwent an interesting censorship path. See Gabriele Perrone, "Le 'Nozze d'oro' della 'Ambrosio', dal concorso cinematografico del 1911 al restauro del 2011," cit., pp. 144-145.

[37] English title: *The Sardinian Drummer Boy*. The movie was directed by Umberto Paradisi for Cines. Vittorio Martinelli, Aldo Bernardini, *Il cinema muto italiano. I film degli anni d'oro; 1911*, vol. 21, Nuova ERI, Torino 1996, p. 197. The movie is made available by CSC – Cineteca Nazionale at https://vimeo.com/179869335/73eb7d543a, last visit 19 October 2018.

[38] This was the first time that an episode from *Cuore* was adopted to cinema, but there were later attempts: in 1915-1916 the production company *Gloria* will remake all the nine short stories. Giovanni Lasi, *Il Risorgimento nel Cinema Italiano*, cit.

[39] Simonetta Soldani, Gabriele Turi, *Fare gli italiani: scuola e cultura nell'Italia contemporanea*, vol. I, Il Mulino, Bologna 1993.

[40] On the sacrifice for the nation see Roberto Balzani, *Il sacrificio patriottico nel Risorgimento*, in Lutz Klinkhammer, Oliver Janz (eds.), *La morte per la patria: la celebrazione dei caduti dal Risorgimento alla Repubblica*, Donzelli, Roma 2008, pp. 3-21 and Lucy Riall, *"I martiri nostri son tutti risorti!" Garibaldi, garibaldini e il culto della morte eroica nel Risorgimento*, in *Idem*, pp. 23-43.

[41] Ilaria Porciani, *Tra la disciplina e la retorica. Il Tricolore dall'unità alla guerra mondiale*, in Mirtide Gavelli, Otello Sangiorgi, Fiorenza Tarozzi (eds.), *Colorare la Patria. Tricolore e formazione della coscienza nazionale,1797-1914*, Vallecchi, Bologna 1996, pp. 21-34.

[42] Alberto Mario Banti, *Sublime madre nostra. La nazione italiana dal Risorgimento al fascismo*, cit.

[43] English title: *St. Francis of Assisi*. Direcor: Enrico Guazzoni, *Cines*. Vittorio Martinelli, Aldo Bernardini, *Il cinema muto italiano. I film degli anni d'oro; 1911*, vol. 1, Nuova ERI, Torino 1996, pp. 80-84. For a detailed description of the framing and related illustrations, see Alfredo Baldi (ed.), "Il poverello di Assisi," in *Immagine. Note di Storia del Cinema*, no. 4, I series, June-September 1982, pp. 29-33. Some stills are available in the Eastman Collection online: https://collections.eastman.org/advancedsearch/objects/beginDate%3A1911%3BendDate%3A1911%3Btitle%3Apoverello%20d%27assisi%3Bpeople%3Aguazzoni, last visit 19 October 2018.

[44] For analysis on the fortune of St. Francis in Italian cinema see Vito Attolini, *La tradizione francescana nel cinema italiano*, in Id., *Immagini del Medioevo nel cinema*, Dedalo, Bari 1993, pp. 97-118; Aldo Bernardini, *I film francescani nel cinema muto italiano*, in Domenico Meccoli (ed.), S*an Francesco d'Assisi nel cinema: dal muto al sonoro: Assisi, 21-27 giugno 1982*, Tipografica editrice romana, Roma 1982; Claudio Camerini, "Tre film francescani," in *Immagine. Note di Storia del Cinema*, no. 4, I series, June-September 1982, pp. 25-28.

[45] On the re-use of Middle Ages during the 19th and 20th century see Enrico Castelnuovo, Giuseppe Sergi (eds.), *Arti e Storia nel Medioevo: Il Medioevo al passato e al presente*, vol. 4, Einaudi, Torino 2004.

[46] On cinema and Medioevo, see Stefano Pittaluga, Marco Salotti, *Cinema e Medioevo*, Facoltà di Lettere, Dipartimento di archeologia, filologia classica e loro tradizioni, Genova 2000; Renato Bordone, *Cinema e Medioevo*, in Daniela Romagnoli (ed.), *Lezioni sul Medioevo*, Guastalla 2006, pp. 79-84; for a general chronology of movies with medieval subjects http://www.cinemedioevo.net/, last visit 19 October 2018.

[47] Ilaria Porciani, *La festa della nazione: rappresentazione dello Stato e spazi sociali nell'Italia unita*, Il Mulino, Bologna 1997.

[48] Although Catholics were forbidden from the Pope to take part to political life until 1919.

[49] "XX Settembre," in *Giornale ufficiale illustrato dell'Esposizione Internazionale delle Industrie e del Lavoro*, September 1911, p. 1.

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Spain as National Dreamscape: The Interplay of Dioramas and Moving Images in the 1929 Barcelona International Exposition

> *"The author. – […] Do you know the neoramas in the Pueblo Español?*
> *A friend. – Yes, and they seem to me worthy of the astounding Barcelona event. I think that placing them inside the large houses in Pueblo Español has been another wise choice, because this way the houses are not empty and dilapidated, but they contain in their bosom the whole Spain. It is* as if they had *a heart.*
> *The author. – Or rather,* as if they had *a spirit."*[1]

International expositions and the without-names logic

The World's Fairs that developed in Europe in the late 19th and early 20th century are a unique standpoint from where to envisage a history of cinema without names, in line with the Film Forum goal of rethinking film and media from fresh non-authorial perspectives. Even if their promotion may have benefited from the involvement of renowned architects, scientists or artists, these expositions highlighted collective national efforts and technological progress instead of individual qualities or names. That non-authorial condition becomes clear when comparing World's Fairs with modern Olympic Games, for instance, which emerged a few decades later and also featured national rivalries, but where the success of the individual sportsman went beyond geographical affiliations, reinforcing a name-driven logic of heroes and personal records. Conversely, international expositions were collective performances and their pavilions showcased more the identity and achievements of entire countries (as disputed as the notion of "country" may be) than the style and merits of an individual character. But, as our opening quote suggests, that without-names logic of World's Fairs could also foster homogenizing nationalistic agendas, specially in cities like Barcelona, where the tensions of conflicting nationalisms run deep and remain centuries-old. Because, as we will argue in our analysis of the 1929 International Exposition, a world's fair may very well be a smokescreen to infuse "patriotic spirit" in a country that is a heartless façade… *as if it had* a heart.

As far as film is concerned, its early inclusion in the World's Fairs at the turn of the century highlighted its role as an epitome of technological development, in those early stages where cinema stood as one device among others in the motley visual culture of modernity, together with panoramas, dioramas, magic shows and technological showcases, when their regular formats and standard lengths had not yet been defined. Not by chance, researchers like Malte Hagener stress how the interplay between World's Fair formulas with mass audience appeal and European avant-garde practices shaped the early decades of film culture in multi-faceted ways: "The avant-garde contributed to the development of the functional differentiation of the World Fair and the amusement park, the trade fair and the film festival, different formats that are still with us today."[2] Throughout the following decades, while silent film began to be tamed by narrative impositions, a commercial structure and a set of important names (mostly actors and filmmakers), World's Fairs somehow dodged that transformation and reinforced the half-technological and half-entrepreneurial origins of the medium. Scientific recordings, industrial films and folklore reels had a steady presence in international expositions, while the big stars and names of the emerging cinema industry didn't have the importance that they would later acquire thanks to the film festival format.

The 1929 Barcelona International Exposition took place at the end of the silent film period and is an interesting case to better grasp the audiovisual landscape and cultural implications of World's Fairs. However, the scarcity of available materials until today has prevented film scholars from studying the role of cinema during the event: crucial books on Spanish and Catalan cinema make only brief comments about the Exposition, most of the mentions being connected with the emergence of talkies. Indeed, the first film screening with synchronised sound in Barcelona took place in those 1929 summer months,[3] and some years later the brand new Palacio de Industrias Químicas constructed for the exposition would become Orphea, the first film studio in Spain technically prepared for the shooting of sound films.[4] However, in recent years new archival materials have been restored by Filmoteca de Catalunya (the ones we screened in our panel at the 2018 Film Forum Conference), so comparing such available restorations with photographs and other visual materials from the Exposition may open new paths to understand the role of moving images in that crucial – and politically charged – event.

Recent studies such as *World's Fairs on the Eve of War*, by Robert H. Kargon, Karen Fiss, Morris Low and Arthur P. Molella, or Fiss' *Grand Illusion: The Third Reich, the Paris Exposition, and the Cultural Seduction of France*, have explored in depth the ways in which international exhibitions dealt with the bond between national identity and technology in the years prior to World War II. The former stresses how since the early 20th century the celebration of scientific achievements typical of such exhibitions had been infused with strong patriotic overtones: "instead of concentrating mainly on displays of industrial prowess for purposes of trade, they began to emphasize national economic, military, and scientific might," and this emphasis would become an overt ideological struggle in the cases of Paris 1937, Düsseldorf 1937 and New York 1939, as well as the projects for Tokyo 1940 and Rome 1942.[5] On the other hand, Fiss' book examines the German participation in the Paris 1937 exhibition and devotes a whole chapter to its cinema programme, unfolding a complex set of relationships between Germany and France throughout their respective film cultures.[6]

In that context, the 1929 Barcelona Exposition also provides rich materials to explore the complex liaisons of cinema, technology and identity. We aim to study the interplay between moving images and other visual *dispositifs* exhibited during the event, with an emphasis in the tensions and symbols of Spanish and Catalan nationalisms. Firstly, we will contextualize the Exposition and summarize the available information about the role of cinema in its programme, including educational or propaganda films screened in the different venues. The scarcity of this information will prompt us, however, to devote the main body of our paper to three other historiographical trails: the dioramas, the Pueblo Español and the official film of the Exposition. They will reveal the ideology contained in the event's visual attractions, as well as the possibilities of these alternative screens to shape a history of cinema without names, one that brings together an older visual *dispositif* like the diorama, a building complex that was envisaged almost as a film studio, and a supposedly anonymous film newsreel. In our analysis, a special attention will be devoted to the official film, produced by CINAES film company, because its shots either contain or evoke the images from the dioramas and the Pueblo Español, then creating a rich interplay between visual *dispositifs*. At the end of the paper, this interaction will allow us to tackle the link between technology and propaganda in the screens of the 1929 International Exposition, in order to rethink the role of visual displays in World's Fairs more broadly.

From conflicting nationalisms to the Palacio de Proyecciones

Before exploring these *dispositifs*, however, it is necessary to contextualize the Exposition as a whole as well as the role cinema had in its programme. Barcelona had hosted a successful Universal Exposition in 1888, under the auspices of the recently restored Bourbon monarchy and the economic power of the Catalan bourgeoisie. As a consequence, some years later such a success prompted this social group (represented by the Lliga Regionalista de Catalunya and leaded by architect and politician Josep Puig i Cadafalch) to plan a new exhibition meant to display regional economic power and foster Catalan nationalism. This new exposition was to be set in Montjuïc and take place in 1917 as the Exposició d'Indústries Elèctriques. However, those original pro-Catalan plans were delayed by World War I and ultimately trumped by the dictatorship of Miguel Primo de Rivera, who redesigned the event completely in order to match it with the 1929 Ibero-American Exposition in Seville. Primo de Rivera had taken power in 1923 with a military coup approved by King Alfonso XIII, and both the monarch and himself played a crucial role in redefining the Spanish national agenda of the Exposition.

By removing key Catalan icons such as the Quatre Columnes in Montjuïc (which represented the Catalan flag) and christening the premises with meaningful names (such as Plaza España or Pueblo Español), they shifted the focus from Catalan to Spanish nationalism. As Jordana Mendelson explains in her key book *Documenting Spain: Artists, Exhibition Culture, and the Modern Nation, 1929-1939*, both the Barcelona International Exposition and the Seville Ibero-American Exposition

> *were designed to shore up support for the dictatorship's plans for national and pan-Hispanic unity. The themes of the exposition, and their placement at two key points of Spain's political geography, placed the dictatorship squarely in the historical traditions and conquests of the nation's past (Seville) and the industrial promise and modernity of its future (Barcelona).*[7]

That tension between past, present and future is one of the fundamental traits that we aim to negotiate in our analysis, since it lies in the core of the three types of images we are interested in: dioramas, architectural views and cinematic shots.

From the outset, cinema was considered a strategic asset for the Exposition programme. On May 26th, 1929, its official journal claimed: "the so-called silent art deserves a preferential attention in the Barcelona international contest, by virtue of its incomparable power of divulgation, its precious contribution to all kinds of activities and the decisive influence it has in modern life."[8] Indeed, the main building complex in Montjuïc included the sumptuous Palacio de Proyecciones, a classic-style palace designed by architects Eusebi Bona and Francisco Aznar, which occupied an extension of 10,000 square metres and had a capacity of 1,400 people.[9] Although it was demolished after the event, the original blueprint, some photographs and reports from that time give us a hint of its functions. Its central hall hosted performances, screenings and symposiums, such as the tour of the Russian Theodore Wassilieff's Ballet Company, concerts of Spanish and foreign orchestras and choirs, the Third International Theatre Conference and the Short Wave Conference, involving radio and early television. Beside these events, numerous commercial booths were presented in the surrounding rooms, such as that of Cinematográfica Nacional Española (CINAES), a recently established Spanish production company with a leading profile throughout the World's Fair, which included miniatures of its exhibition network and some of the latest film devices.[10]

The information about the screenings in the central hall, as well as the records of the films shown in other pavilions, is sparse and tends to reinforce a technological and pedagogical approach to cinema rather than an artistic one. For example, the programme in the Palacio de Proyecciones included films about German industrial enterprises, most notably the Technical Fair in Leipzig or the chemical and pharmaceutical I. G. Farbenindustrie, as well as *Rheingoldzug*, a trip in a luxury train to visit German cultural landmarks such as Colony cathedral and the settings of *The Ring of the Nibelung*, put together with a trip by plane to the Henkel & Co. factories in the banks of the Rhine. There are also records of film screenings for visitors from Barcelona state schools and charity care centres, as well as some news about the more commercially-oriented *Barcelona-Trailer*, a short sketch film born out of an agreement between the Exposition committee and Hollywood studios. Through different sketches, famous stars such as Maurice Chevalier, Harold Lloyd and Norma Talmadge proved the "alleged" virtues of sound film and greeted the Barcelona audiences with musical performances, some of them in Spanish (unfortunately there is no available footage of the film today, only a series of news reports and photographs that even so prove its existence).[11]

This spare data may offer some clues about the Exposition's audio-visual jigsaw, but the lack of a comprehensive programme of the screenings makes it difficult to trace a panorama or to draw solid conclusions. Even so, a look into different screens within the exposition may point towards an alternative way to it; so in the following sections we will explore such alternative visual devices at greater length, relating the dioramas created for different venues (a) with the architectural "village" of Pueblo Español that was entirely constructed for the event (b) and the official film of the Exposition (c), by considering the shooting of spaces and popular celebrations as well as the depiction of official events with political authorities.

Dioramas and the fake of "good old" history

While the information about film screenings is quite sparse, the register about the dioramas in the Exposition is rather good and well-preserved thanks to numerous photographs available in public archives. Following the fair's records, we have traced the existence of four different groups of dioramas: a series of around 50 to 60 displays of Spanish landscapes showcased in Pueblo Español; a set of views of Barcelona in different historical moments exhibited at the City Pavilion; an exploration of Spanish history in fifteen political events-views depicted in the Palacio Nacional; and six dioramas illustrating chapters of Cervantes' novel *Don Quijote de la Mancha*, also showcased inside the facilities of Pueblo Español.

The dioramas of Spanish landscapes include views of different settings in the peninsula, from Vigo in the Northwestern region of Galicia to the bullfighting plaza of Maestranza in Seville and the Santes Creus monastery in Catalonia. By comparing them, some general features can be traced: they showcase stately churches, medieval bastions and bucolic harbours (no trace of bustling cities, steamy factories or other emblems of modernity), thus anchoring visual signifiers in a prestige version of the nation's past instead of its troubling and contested present (fig. 9). They are also almost devoid of human beings, the few times they appear are just some tiny, scattered figures dominated by impressive ancient buildings, and as a result, the Spanish landscape is portrayed as calm, deserted and unchangeable. At a glimpse, the popular market in front of the Ourense cathedral could seem an exception, but the dressing and the distribution of the characters suggest a slow pace that stands for traditional lifestyle. All of which contributes to the (obviously fake) image of a timeless and untroubled Spain.

The lighting strategies typical of dioramas may infuse a slight action into these postcard-like scenes, but as far as luminosity is concerned visual effects were limited to a basic day/night interplay, which goes back to the early devices by Louis Daguerre. For example, in the León diorama, its Gothic cathedral appears shrouded in mist at daytime and shining over the murk at night; and the views of both Mallorca and Río Tinto make a lighting contrast between the sailing boats in the foreground and the coastline in the background. While Walter Benjamin showed his concerns about the kind of quick changes represented in certain dioramas, which squeezed a whole day in 15 minutes and became "something like a sportive precursor of fast-motion cinematography – a witty, and somewhat malicious, 'dancing' acceleration of time,"[12] in this particular case such accelerating vertigo is unjustified, because the lighting casted over the Spanish landscapes arouses a cyclic, eternal permanency, instead of the rush of modern life. Not surprisingly, social and political changes in the country are ignored, focusing on the prestige narrative of an architectural (and very catholic) past.

This historical permanence is strengthened if we compare these views with the dioramas of the ancient Barcelona, a series of perspectives of the city recreating its Roman and Medieval times. With the exception of a few views depicted within the cities, in most cases we remain outside urban fortifications and sometimes quite far from them, both in the dioramas focused on Barcelona and the ones portraying other Spanish cities. Devoid of human beings, the city is presented from a distant, privileged standpoint that is sometimes framed by a window, just a far-away bunch of buildings stretching distantly in the horizon. Although these views are explicitly placed in a glorified past, the avoidance of any human life gives them a perennial quality that is closer to a pictorial evocation of well-preserved ruins than to a lively historical reconstruction of an urban centre. Overall, both in the Spanish landscapes and in the ancient Barcelona, time seems to be frozen in an ideal, unchangeable past incarnated by impassable stonewalls, powerful cathedrals and placid squares scattered throughout small towns.

The historical dioramas in the Palacio Nacional may give a different picture, complementary in various ways. They display fifteen episodes of Spanish history spanning 1,200 years, from the Visigothic King Recesvinto in the 7th century, until the inauguration of the first Spanish railroad service between Mataró and Barcelona in 1848. Although some attention is devoted to cultural achievements (like Romanic paintings or poets such as Fray Luis de León and Francisco de Quevedo), the dioramas are mostly focused on kings and heroes who fought against the Arabic kingdoms both in the peninsula and across the Mediterranean, like El Cid or Jaume I El Conqueridor. They are organised around group scenes that place the monarchs discussing with aristocrats or generals, welcoming important visitors or taking part in military campaigns, although they remain calmed and tend to avoid the battlefield roar. The Catholic Kings, whose marriage unified the two main kingdoms in the peninsula and who expelled the last Muslim forces from its lands, appear here receiving Cristóbal Colón after his journey to America, with some indigenous people shown as trophies under a colonialist gaze, bringing together Spanish unionism, Catholic homogeneity and the imperial expansion overseas (fig. 10). Interestingly, the diorama of the railway service that closes the series is a strong exception to the rule, because it distances itself from the royal celebration, the Catholic dogma and the political unionism, depicting a bourgeois scene from the interior of a train station, with just a blurry image of the inauguration (Spain's first railroad) seen through the doorway panes.

Last but not least, the six dioramas featuring the deeds of Don Quijote de la Mancha focus on important moments of Cervantes' novel, such as the attack against the giant windmills or his descent into Cueva de Montesinos. Arranged by Carlos Vázquez, they display more action than the Spanish historical dioramas commented above, most notably in the episode of the fake flying horse Clavileño, and suggest interesting contrasts between distinct figures in the foreground and others in the background: in the windmill episode, Don Quijote, who has just fallen from his horse, is a mannequin placed in the foreground, while Sancho Panza is just part of the painted background. Conversely, in the death of Don Quijote, Sancho Panza is now a three-dimensional figure, while the agonising Don Quijote has become a ghost, painted over the background, in a transfiguration of the presence/absence liaisons of the famous duet.

In that sense, in her crucial analysis of the African Hall dioramas in the American Museum of Natural History, Donna Haraway stated that

> *each diorama presents itself as a side altar, a stage, an unspoiled garden in nature, a hearth for home and family. As an altar, each diorama tells a part of the story of salvation history; each has its special emblems indicating particular virtues. Above all, inviting the visitor to share in its revelation, each tells the truth. Each offers a vision. Each is a window onto knowledge.*[13]

Her words refer to Carl Akeley's works from the early 20th century depicting some sort of African Eden, but they can be read more broadly and evocate the (troubling) moral lessons taught in the Barcelona Exposition. Indeed, the dioramas about Spanish geography, history and culture provided the visitor with untouched landscapes, sacred fortresses and cathedrals; they offered a Catholic salvation history with noble monarchs; and they enlightened the visitor with some chapters from the most famous Spanish novel. Overall, lessons about an embellished version of history, a nationalist fake, with no traces from real contemporary life, and consequently, absolutely no evidence of the troubled political present that had fuelled the exhibition's nationalistic agenda, and that would soon explode in the tragic events of the Civil War. Windows to a "good old" Spanish essence seeking to indoctrinate the believer; symptoms of an exploitative past from a fake present.

The Pueblo Español, a king-size, real-life diorama

Strongly connected with the geographical project of the dioramas, the Pueblo Español was a singular endeavour in the context of the Exposition and is still a major touristic attraction of the city today. While most of the buildings in Montjuïc were "grandiloquent and monumental constructions that could be defined as Neo-Beaux-Arts," and that revealed a "permanent contradiction between an obsolete (decorative) exterior and a modern (technical) interior,"[14] the Pueblo Español construction was loyal to tradition in a different way. Its 42,000-square metre enclosure included 117 real-scale buildings showcasing castles, churches and streets from different regions of Spain, composing a kind of collage of architecture styles, historical periods and regional identities (fig. 11). One could walk in an Andalusian street and find a Galician typical house just around the corner, before bumping into a Basque palace or a Castilian convent. As Jordana Mendelson stresses, the intervention of Primo de Rivera and the King Alfonso XIII in the organisation of the Exposition was crucial for the final design of the project: it was set in Montjuïc's central area and included an Andalusian neighbourhood, something that the original plan had discarded in order to avoid any clash with the event in Seville. But, most notably, the Spanish government forced an internal unity that fostered Spanish nationalism, thus creating a "synthesis of all the towns of the nation," as impossible as that may sound.[15]

Following Mendelson's account of its history and significance we can trace some of the main features of Pueblo Español. Although similar projects had taken place in previous World's Fairs (such as 1900 Ville de Paris and 1908 Irish Village), this one was the most ambitious for its realism, cohesion and national significance. Photographs taken on a tour around Spain and reinterpreted by architects were used as models to craft true imitations of the buildings, therefore placing the endeavor in an intersection between ethnographic projects, dioramas and touristic postcards. At that time, both ethnography and tourism were being encouraged by Spanish and Catalan institutions: in fact, the dictatorship had established a national tourist agency, the Patronato Nacional de Turismo, just a year before; and regarding ethnography, in 1915 some intellectuals linked to University of Barcelona had created the Arxiu d'Etnografia i Folklore de Catalunya. In a letter to its founder Tomàs Carreras i Artau, folklorist Jaume Oliver Castañer stated that "folklore is, well, a complex science, not an art. For this reason, it is not necessary for a folklorist to be an artist or writer, but a psychologist and naturalist… who is in greater need of a phonograph and a Kodak than of a brush and rhetoric."[16] In a way, the production process of the Pueblo Español could be summarized in this fashion: the design emerged from an anthropological and geographical research, exposed a series of images in the fashion of dioramas, and ended up producing an idealized image for tourists eager to have a photo taken in front of a (fake) Gothic façade.

According to Mendelson, the most important consequence of this visual interplay was that Pueblo Español, in the likes of the ethnographic research, the diorama and the postcard, relied on a difficult balance between fact and simulacrum, which somehow revealed the frailty of the Spanish national project itself:

> *the Poble was both an ideal dreamscape in which rituals of citizenship and nationality were performed, and an obvious construction in which the balance of harmony and fragmentation was constantly in danger of becoming undone. The use of photography in the town's creation and promotion is key to the ways in which it operated both as fact and fiction for visitors who attended the exposition. Photography provided the necessary foundation on which the architects were able to construct realistic illusions on which the dictatorship initially depended to build a coherent vision of nationality.*[17]

The ideal geography that was the base of the precinct masked an embellished nationalism that brought all the Spanish regions together in an impossible pastiche, striving to find an essence or a synthesis, and crafting a promotional dreamscape of the country.

The propaganda efforts of Primo's dictatorship benefited from this dialogue between reality and fiction. In fact, the buildings around Pueblo Español's main square hosted the dioramas analyzed before, and the village as a whole could be considered a larger-than-life diorama in itself: it is absolutely fundamental to stress that Matrioshka-like doubling of images in the Exposition, with painted dioramas (most of the above-mentioned ones) were placed inside a huge diorama-like architectural complex (the entire Pueblo Español). Consequently, the geography "lessons" that the visitor could learn in the postcard altars of the dark rooms, down in the diorama level, would turn into real-size walls, constructed porticos and huge towers when taking a walk upstairs, in the actual premises. We may imagine the visitors experiencing such a comparison when entering from the street into the diorama exhibitions, or when leaving the darkness behind going out to the street (a process intuited in the film reels, as we will see in the last sections of this article). Shifting between different simulacrums, audiences of the time could have compared the artificial day/night procedures of the dioramas with the real, dazing light of the sky in Barcelona, and the miniatures with the real-scale models, both in buildings and around human figures. Indeed, the Pueblo Español included not only houses, arcades and cathedrals, but also female hostesses and models who walked around to simulate the life in a typical Spanish town (reinforcing misogynistic tropes still prevalent today in trade fairs).

Of course, this enveloping experience worked to strengthen political propaganda. While some definitions of diorama stress the immobility of the observer, as opposed to the surrounding panorama,[18] other approaches include in this terminology real-scale models where the visitor can walk through. This is the case of Noémi Étienne, who underlines the difference between *dioramas-tableaux*, *dioramas-vitrines* and dioramas as immersive experiences, placing their political meaning precisely in this evolving aspect of spatialization: "The dioramas are also political: not only for their iconography, often discussed in postcolonial studies, but also because of their materiality […] dioramas build historicity regimes, in François Hartog's terms: they inscribe alive populations into an imaginary past."[19] This is the case of Pueblo Español because even if the 1929 visitor could feel safe facing the dioramas of prestigious landscapes and history, ultimately these streets provided a fake immersion in a national dreamscape. No way to escape neither from this scenery nor from its "pedagogical" lessons: the didactic altar had become, at the end, an indoctrinating cathedral.

Screening traditions: Folklore film reels

The cinematic dimension of both the dioramas and the Pueblo Español seems clear from the outset, but what about the actual film reels shot inside those exhibition spaces? In *Wondrous Difference: Cinema, Anthropology & Turn-of-the-Century Visual Culture*, Alison Griffiths suggests that a spectator strolling around the diorama life groups in a museum crafts a movie in her mind, even suggesting that each diorama could be the scene of a film and that they recall the images of the first ethnographical recordings.[20] The Spanish postcards, the national history and the Quijote adventures on the one side, and the streets and squares of the Pueblo Español on the other, composed an imaginary and glorifying film that the visitors of that time screened in their minds while circulating across such spaces. For this reason, we consider that the official movie of the Exposition has a special value for our analysis, since it juxtaposes with the dioramas and contains multiple scenes shot at Pueblo Español, like a documentary register of the activities that took place there, testifying the uniqueness of the place as a real-life diorama. Moreover, this film was a propaganda endeavour funded by the Exposition, and became in itself a kind of didactic diorama, or at least a visual *dispositif* comparable to it.

But before analyzing the film's contents in the following sections, we should briefly trace its origins. The local distribution and exhibition company CINAES (Cinematográfica Nacional Española, S.A.), a conglomerate founded just months before the Exposition, got the rights to film the main and daily events during the event, as well as the stands of 44 companies. According to the available historical sources, those images were exhibited in newsreels and edited in a long feature film called "Película de la Exposición," which summarized its major activities and was premiered in June 23rd, 1929. Thanks to a letter from 1930, we know that film pioneer Ramón de Baños offered this movie to a particular exhibition company, but the historical traces end here, because this film has not been preserved in its original editing and only some parts survive. Filmoteca de Catalunya holds fifty materials, positive nitrates and some acetate duplicates from the CINAES and Baños collections. In 2009, archivist Iolanda Ribas edited these excerpts in chronological order, and this is the material we have been able to analyze (contrasting with her some of our working hypothesis). Given its connection with the disappeared original feature, we will refer to that reconstruction as the official film.

While the preserved materials include images from different pavilions and important events of the Exposition programme, here we will focus solely on those set in the Pueblo Español (leaving the rest of the 150 min footage for another occasion). To start with, we find several film shots of the Spanish landscapes dioramas analyzed above, mostly including views from Andalusia and Castilla, which are unfortunately rather poor in terms of the footage's quality and restricted to isolated shots of some of the pieces. They are filmed either from a certain distance which reveals their framed presentation amidst the darkness, or by plunging into them and blending the diorama frame with the limits of the shot. We remain clueless about their perceived size or the ways they were presented, because the film rules out any general views of the exhibition rooms, as well as any hint of technicians or visitors that would allow a scale estimate.[21] These are very disappointing registers indeed, although its blending of the dioramas' frames and of the film montage itself suggest a productive *mise-en-abyme* between these visual displays and the official exposition movie.

The way in which Pueblo Español itself (not its dioramas) is portrayed in the footage is more suggestive, both in the general views and during particular events. The streets and the squares are shown as rather empty places, and the few human beings depicted are either dressed-up models or working-class people in their daily life, who pose or walk towards the camera with a mousy gesture. Significantly, they do not seem visitors or tourists… In the likes of the Spanish landscape dioramas, these establishing shots highlight the untouched and almost untouchable nature of Pueblo Español, its aim to reconstitute how a typical Spanish town looks like while concealing its touristic purpose. When the Pueblo Español becomes the setting of particular events, its streets are filled up with shows and public, but their inherent meanings are kept. In the same way that buildings from different regions were juxtaposed architecturally, traditions from all over Spain were performed and staged in its central square. Indeed, the Exposition film includes a Festival of Regional Dances, Navarra choirs, Catalan parading giants (*gegants*) and human towers (*castellers*), an open-air theatrical performance including guitars and flamenco, a parody of bullfighting with dwarfs, and a group of women cooking delicious Valencian fritters (*bunyols*) in large, steamy pans. These shots of folkloric performances are the human incarnation of the eternal atmosphere that pervaded every slide in the diorama exhibition; traditions are envisaged as strong and rooted as those solid towers and ancient cathedrals, and modernity is put aside (fig. 12).

The spectacularised, ahistorical display of cultural identities was an imperialist feature that can be traced back to national fairs in the mid-19th century, and it became a regular feature of international expositions with the introduction of ethnographic villages in Paris in 1889. They aimed to exhibit non-European communities and traditions to be explored with a flaneur-like, distracted but nonetheless controlled gaze, as Curtis M. Hinsley put it referring to the Midway street in World's Columbian Exposition in Chicago, 1893:

> *the scenes of this world appear to pass before the eyes of the passive observer/consumer, but both colonialist ideology and the dynamic demographics of the Midway demand that control remain with the strolling crowd. The central concourse, with its escalator-like movement of humanity, indicates both a successful history in the New World and a successful fair. Thus, as the fairgoer strolls among the bazaar of exotica, he or she steps from the concourse of history and commerce into the side streets of stasis, clamour, and sensual temptation.*[22]

Along those lines, the folkloric patchwork inside Pueblo Español matched the surrounding buildings with postcard-like dioramas, and at the same time provided all the clichés of the Spanish holiday tour: bullfighting, dancing, singing and food, matching national pride and international trademark. In some of the images, dressed-up girls take photos of the visitors, adding misogynistic commodification to this "successful" recipe of Spanish stereotypes. Not surprisingly, in his crucial book on international exhibitions, Paul Greenhalgh places the Pueblo Español as an example of the "ambassadorial role" (as opposed to racial, imperial or commercial motives) of some human villages, which pursued "the dual purpose of creating an image of national stability before an international audience and of encouraging foreign visitors." According to him, the project of the Pueblo Español is the only human village from the exhibition tradition that remains standing today, and its main aim was "to sell a particular vision of the Spanish nation to a Europe which appeared reluctant to visit."[23] This reluctance is unbelievable today, and the precinct seems a terrible prophecy of how tourism business would transform Barcelona and other Spanish cities in caricatural postcards for a foreign consumption.

At a certain moment in the official film, out of these touristic performances, a big balloon with the height of three men is lifted from the ground; in its cloth we can read "Pueblo," probably part of a longer text saying "Pueblo Español," and from its base a long Spanish flag hangs and flutters in the wind. Just after being lifted in the middle of a big crowd, the film cuts to an enormous zeppelin flying over the same square and throwing paper streams over the cheering crowds. The comparison between this nationalistic balloon and the powerful flying machine is clever and striking. In both cases, the technological development is linked to a particular national identity and political power: in the first case claiming for identity in a supposedly poetical way; in the second, boasting military power while hovering above the city. However, the differences are very strong, and the balloon seems somehow ridiculous in comparison to the more impressive zeppelin. As ambiguous as it may be, this editing makes something clear: the Pueblo Español balloon is local, traditional and quirky; the astounding zeppelin comes from outside, from a (truly modern) world far beyond the Pyrenees... In 1929 technology existed, and it was of course celebrated across the Exposition spaces, the latest innovations shining in the national booths, but there are not traces of that (alleged) progress in most of the film reels, they could have been shot two decades before and few things might have changed. Be it through commodifying tourism or with aerial technology, in the Pueblo Español modernity always comes from outside, so the Spanish village remains an untouched diorama, a sanctuary of tradition.

Legitimizing power: Kings of past and present

In his long list of notes for the *Arcades* project, Walter Benjamin established a series of striking connections between panoramas or dioramas and other cultural manifestations, including zoos, Balzac's human comedy, the feuilleton and portrait series.[24] The national collage staged by the folkloric performances in Pueblo Español is loyal to this tradition: it offers a kind of repertoire from which we can learn a moral lesson about identity. The official film, as a loudspeaker of the official events, uses the same conservative approach to the Spanish landscape to make a portrait of the precinct and its folkloric events. However, in this human comedy that was staged in the Barcelona Exposition (a few years prior to the tragedy of the Civil War), and that the film subserviently registered, another, very important character played his part: the King Alfonso XIII. With him we will explore another moral lesson and the last important connection between the dioramas and the official film.

The inauguration of the Pueblo Español took place on May 21st, 1929, and counted on the presence of King Alfonso XIII, Queen Victoria Eugenia and Prince Jaime. In the film, the Kings and the Prince stroll around the fake streets and squares with a retinue of important men and women from the city, and are cherished by the awaiting crowds in the packed premises, although sometimes the royal entourage itself seems bigger than the audience. The King is doubtlessly the main character, the hero of the film. At a particular point, after the card "The King answers to the enthusiastic popular acclaim," we see him waving his hand from a balcony and producing popular exhilaration by climbing into the banister (fig. 13). His dare seems to be the consequence of a challenge proposed by the crowd, but it is also a way of re-framing himself: from the middle-shot framed by the balcony gate (one that levels every politician, both important and secondary, young and old) to the full shot of his athletic body, the one of a healthy, young, powerful King, standing up higher than anyone else.[25]

While the Spanish landscape dioramas were re-staged by the Pueblo Español design and by its folkloric parties, the historical displays with El Cid, Jaume I or the Catholic Kings were brought to the present with the newsreels portraying Alfonso XIII. One of those dioramas showed Alfonso V de Aragón triumphantly entering in Naples in a horse-ridden carriage escorted by soldiers and headed by trumpeters… Some centuries later, his late successor Alfonso XIII visits the Pueblo Español with a bourgeois entourage of high society ladies and gentlemen.[26]

The editing of his visit is quite clever and brings together the traditional Spanish landscape and the rituals of power. Images of royalty and local authorities entering into the premises are intersected with postcard-like shots that offer different views of the Pueblo, such as those of the Andalusian neighbourhood. It is a suspense cross-cut editing where the empty streets with its dressed up models wait for the royal procession and the crowds, juxtaposing two different types of images: the deserted landscape on one hand, and the royal power propaganda on the other (fig. 14). In a way, the Spanish postcards wait for the kings and the crowds to fulfil them visually and send the buildings to the background, just as if a landscape diorama (a fortress in Castilla) became a historical one (the Catholic kings receiving Colón). The dioramas and the official film therefore share the same intent of screening power and placing it in a particular landscape, with the difference that the dioramas showcase the past whereas the film screens the present. In a way, the official movie re-enacts the dioramas in contemporary times, gives them a new material life and consistency, attempts to actualize both monarchy itself and the perceived image of Spain… but not for too long. Because two years later, the Second Spanish Republic was proclaimed, and the dioramas of Don Quijote – his heroic madness stuck in an idealized past – would become the ironic representation of Spanish Royal power.

Conclusions

Overall, we have seen how in spite of the claims for a central role of cinema within the 1929 Barcelona International Exposition, the records of the screenings included in its programme are rather sparse and poor. However, an exploration of other, surrounding screens, such as the dioramas, the Pueblo Español and the Exposition's official film, is worthy and revealing both in terms of the ideology that sustained the event and the ways it was disseminated through different visual attractions, with a strong interplay between painting, architecture and cinema. According to the authors of *World's Fairs on the Eve of War*, the expositions from 1937 to 1942 differed from the previous ones because "they focused their spotlights on ideological struggle,"[27] but our analysis of the Spanish 1929 case has revealed obvious ideological overtones as well, all of them enhanced by a particular link between identity and screens, in the service of nationalism.

A final comparison may lay bare this strong bond between representation, power and history. On November 23rd, 1929, the conservative Catalan newspaper *La Vanguardia* printed out a graphic booklet to promote the Exposition, with very symptomatic juxtapositions. Next to some photographs of the World Fair, depicting the classic-style pavilions and the landscape dioramas, other images were included in the issue: some miniatures of a monument devoted to Queen María Cristina, the Spanish King's mother; a homage to poet Zorrilla in Valladolid; an archbishop's portrait, and, most notably, a photo of the recently created public institution of Legionarias de la Salud, school girls dressed up in a military fashion and performing the fascist greeting. A collage of the very Spanish traditions of monarchy and religion with the "modern" brainwashing techniques of fascism pioneered by other European countries back then... In fact, tradition and power were the two sides of the coin during the 1929 Barcelona International Exposition, and the interplay between dioramas, Pueblo Español and the official film illustrates this historiographical construct visually. While the dioramas showed idealised moments of the country's "good old" history, King Alfonso embodied a contemporary power legitimized in the past but choreographed as actual, with his fake bourgeois clothes placing him within the community of "modern" businessmen and politicians. In Barcelona, during the summer of 1929, a prestige version of Spain's past was screened in the dioramas, indoors, while the business of the present was performed outdoors, for the film cameras: a simulacrum of national identity and traditional powers, both under threat by the momentum of modernity.

Illustrations

9. Diorama of Palma de Mallorca, by Junyent, exhibited in the Pueblo Español. Photographer: Gabriel Casas i Galobardes. Arxiu Nacional de Catalunya.
10. Diorama of the Catholic Kings receiving Cristóbal Colón, by Junyent, exhibited in the National Pavilion. Photographer: Gabriel Casas i Galobardes. Arxiu Nacional de Catalunya.
11. View of the Pueblo Español. Official Film of the Exposition (CINAES, 1929). Filmoteca de Catalunya.
12. Flamenco performance in the Pueblo Español. Official Film of the Exposition (CINAES, 1929). Filmoteca de Catalunya.
13. Alfonso XIII climbs into a balcony in the Pueblo Español. Official Film of the Exposition (CINAES, 1929). Filmoteca de Catalunya.
14. Alfonso XIII in the inauguration of the Pueblo Español. Official Film of the Exposition (CINAES, 1929). Filmoteca de Catalunya.

Notes

[1] Original: "El autor. – […]¿Conoces los neoramas del Pueblo Español?
El amigo. – Y me parecen dignos del grandioso Certamen barcelonés. Haberlos instalado en el interior de las casonas del Pueblo Español creo que ha sido uno de los muchos aciertos; así, las casas no están vacías y destartaladas, sino que encierran en su seno a España toda. Es como si tuvieran corazón.
El autor. – Mejor, quizá, como si tuvieran espíritu." Antonio Fernández Escobés, "Los Neoramas del Pueblo Español: Madrid," in *Diario Oficial de la Exposición*, no. 39, 30 November 1929 (our translation).

[2] Malte Hagener, *Moving Forward, Looking Back: The European Avant-Garde and the Invention of Film Culture*, Amsterdam University Press, Amsterdam 2007, p. 141.

[3] See Esteve Riambau, *El paisatge abans de la batalla: el cinema a Catalunya (1896-1939)*, Llibres de l'Índex, Barcelona 1994, p. 41. Also Román Gubern, Kathleen M. Venron, *Soundtrack*, in Jo Labanyi, Tatjana Pavlović (eds.), *A Companion to Spanish Cinema*, Wiley-Blackwell, Chichester 2013, p. 373.

[4] Román Gubern, *El cine sonoro (1930-1939)*, in Román Gubern, José Enrique Monterde, et al., *Historia del cine español. Segunda version ampliada*, Cátedra, Madrid 1995, pp. 127-128. For a detailed account of Orphea see Josetxo Cerdán, Luis Fernández Colorado, "Estudios Cinematográficos Orphea Film: la química de un sueño," in *Actas del VII Congreso de la AEHC*, Madrid 1999, pp. 93-109.

[5] Robert H. Kargon, Karen Fiss, et al., *World's Fairs on the Eve of War: Science, Technology and Modernity, 1937-1942*, University of Pittsburgh Press, Pittsburgh (PA) 2015, p. 4.

[6] Karen Fiss, *Grand Illusion: The Third Reich, the Paris Exposition, and the Cultural Seduction of France*, University of Chicago Press, Chicago 2009.

[7] Jordana Mendelson, *Documenting Spain: Artists, Exhibition Culture, and the Modern Nation, 1929-1939*, Pennsylvania State University Press, University Park (PA) 2005, p. 9

[8] Original: "El llamado arte mudo ha de merecer en el Certamen internacional de Barcelona la atracción preferente que por derecho le corresponde en virtud de su poder incomparable de divulgación, su valioso concurso a las actividades de todo género y la influencia decisiva que ejerce en la vida moderna." "El Palacio de proyecciones," in *Diario Oficial de la Exposición*, no. 11, 26 May 1929 (our translation).

[9] "La Cinematografía en la próxima Exposición de Barcelona," in *Arte y Cinematografía*, vol. 20, no. 333, January 1929.

[10] This commercial intent was criticised, even before the exhibition, by the magazine *Arte y Cinematografía*, stating that "the Palacio de Proyecciones cannot be a customary commercial fair where those who acquired booths aim for nothing but a particular interest. Something else should be done, something interesting and educational that grabs the visitor's attention, such as a Historical Exposition of the Cinematograph to allow the appreciation of its outstanding development." (our translation) Original: "El Palacio de Proyección, además, no debe ser una simple feria comercial en la cual los que hayan adquirido *stands* sólo tengan por ideal un interés particular. Hay que hacer algo más, algo interesante e instructivo que atraiga

la atención del visitante, como por ejemplo, una Exposición Histórica del Cinematógrafo, con la que podría apreciarse su fantástico desarrollo." "La Cinematografía Nacional en la próxima Exposición Internacional de Barcelona," in *Arte y Cinematografía*, vol. 20, no. 334, February 1929.

[11] See *Popular Film*, vol. 4, no. 162, 5 September 1929.

[12] Walter Benjamin, *The Arcades Project* (*Das Passagen-Werk*, in Rolf Tiedemann, Hermann Schweppenhäuser [eds.], *Gesammelte Schriften*, Suhrkamp-Verlag, Frankfurt am Main 1982), Belknap Press, Cambridge (MA)-London 1999, p. 529. Translated by Howard Eiland and Kevin McLaughlin.

[13] Donna Haraway, "Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City, 1908-1936," in *Social Text*, no. 11, Winter 1984-1985, p. 24.

[14] M. Carmen Grandas, *L'Exposició Internacional de Barcelona de 1929*, Els Llibres de la Frontera, Barcelona 1988, p. 199.

[15] Jordana Mendelson devotes an entire chapter of her book to the complex layers and signifiers of Pueblo Español. Jordana Mendelson, *Documenting Spain: Artists, Exhibition Culture, and the Modern Nation, 1929-1939*, cit., pp. 1-37.

[16] *Idem*, p. 14.

[17] *Idem*, pp. 4-5.

[18] Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, MIT Press, Cambridge (MA) 1990, pp. 112-113.

[19] Original: "Les dioramas sont aussi politiques: non pas seulement pour leur iconographie, souvent discutée dans les études postcoloniales, mais aussi, pour leur matérialité […] les dioramas construisent des régimes d'historicité, au sens de François Hartog: ils inscrivent des populations bien vivantes dans un passé imaginé." Noémie Étienne, "La matérialité politique des dioramas," in Laurent le Bon, Claire Garnier, Florence Ostende (eds.), *Dioramas*, Flammarion, Paris 2017, pp. 186-193 (our translation). Étienne has also explored the political materiality in the case of the anthropological dioramas in the New York State Museum in Albany, depicting the First Nations of the Iroquois Confederacy and built between 1906 and 1917. Étienne explains that the exhibited clothing was crafted in the reservation by Iroquois people following traditional procedures, even if they weren't used anymore and had to be reintroduced. These conditions became the authenticity guarantees for the garments, instead of its age or its previous use in the real community. Noémie Étienne, "Memory in Action: Clothing, Art, and Authenticity in Anthropological Dioramas (New York, 1900)," in *Material Culture Review*, no. 79, Spring 2014, pp. 46-59.

[20] Alison Griffiths, *Wondrous Difference: Cinema, Anthropology, and Turn-of-the-Century Visual Culture*, Columbia University Press, New York-Chichester 2002, pp. 38-43.

[21] Toledo is the only one where a second, closer shot is included, although it is not clear whether the second is a section of the first or a separate diorama.

[22] Curtis M. Hinsley, *The World as a Marketplace: Commodification of the Exotic at the World's Columbian Exposition, Chicago, 1893*, in Ivan Karp, Steven D. Lavine (eds.), *Exhibiting Cultures: The Poetics and Politics of Museum Display*, Smithsonian Institution, Washington-London 1990, pp. 352-353.

[23] Paul Greenhalgh, *Ephemeral Vistas: The* Expositions Universelles*, Great Exhibitions and World's Fairs, 1851-1939*, Manchester University Press, Manchester 1988, pp. 105-106.

[24] Walter Benjamin, *The Arcades Project*, cit. Benjamin specifically matched the 1900 Paris panorama "Le Tour du Monde" with the zoos (p. 533), the panorama with Balzac's human comedy (p. 535), and, most importantly, the diorama with the feuilleton and portrait series such as *La Grande Ville*, *Le Diable à Paris* and *Les Français peints par eux-mêmes*: "[these works] In a certain sense, they are moral dioramas – not only related to the others in their unscrupulous multiplicity, but technically constructed just like them. To the plastically worked, more or less detailed foreground of the diorama corresponds the sharply profiled feuilletonistic vesturing of the social study, which latter supplies an extended background analogous to the landscape in the diorama" (p. 531).

[25] His gesture is repeated by another character in another sequence of the movie, during the Semana Navarra, in the same balcony, although we just see the discourse and not the actual action of climbing.

[26] Similar relationships with an imperial past can be found in other international showcases by totalitarian regimes. In the German Schaffendes Volk, hosted in Düsseldorf in 1937 to celebrate the economic power of the Third Reich, the pavilion "Deutscher Lebensraum"

included, among maps that justified Germany's expansionism, a reproduction of Alexander Altdorfer's *The Victory of Alexander the Great (The Battle of Issus)* (1529). In a similar fashion, Benito Mussolini used the Esposizione Universale di Roma (EUR), to be held in 1942 but never celebrated, "to channel the spirit of Augustus [...] E42 provided the theatrical Duce with a stage for his role as latter-day Caesar." See Robert H. Kargon, Karen Fiss, et al., *World's Fairs on the Eve of War*, cit., pp. 50 and 112-113.

[27] *Idem*, p. 2.

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Watching Films Scientifically: Traces of Cinema at the Museo Nazionale della Scienza e della Tecnica "Leonardo Da Vinci" in Milan[1]

Cinema in museums today: A matter of exhibition design?

In 1954, one year after its inauguration, the Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci" (MNST)[2] of Milan opened in its building an elegant cinema theatre with 653 seats (461 in the parterre, 192 in the balcony),[3] two different projectors (35mm and 16mm), and a state-of-the-art Cinemeccanica audio system. The hall was designed by the renowned architect Piero Portaluppi (1888-1967), who together with Ferdinando Reggiori and Enrico Griffini also directed the restoration of the Museum building, a former Renaissance monastery in the heart of Milan (fig. 15). From 1954 onwards, the Museum offered a rich programme of daily screenings, six days a week.[4] The regular activity ceased in 1980, and the hall remained closed for many years.[5]

Today, after a restoration in 2007, this impressive space has been transformed into a modern auditorium, dedicated mainly to hosting events and conferences. Film screenings take place only occasionally.

As far as we know, just one film historian wrote about the old theatre after its closure – a personal memory by Luisella Farinotti:

> *In the 1970s in Milan, when I was a child, my mother used to bring me to the movies at the Museo della Scienza e della Tecnica. […] Cinema was exhibited in the sole manner that makes its enchantment understandable: watching a film. Beyond the machine, the museum reproduced the viewing experience, with a proper cinema hall and a ticket entrance, very similar to any second-run theatre in those times. The Museum did not offer any explanations on the screenings, paying homage to a "nineteenth-century museum-archive", an encyclopedic container of the world.*[6]

Farinotti uses her memory as an example of traditional approaches to cinema in exhibition contexts. According to her, from the 1990s onwards, these were surpassed by new modalities:

> *New relationships between cinema and museum were defined precisely by the distance from that mimetic model, aiming to reproduce the common experience of vision. […] Breaking the theatrical scopic regime is a commonplace in contemporary experiences of moving images exploration.*[7]

In the last decades, exhibition designers increased their interest in new media interpretation tools and found creative ways to display audiovisuals and films in museum spaces, directly in the exhibitions. According to media scholar Roger Silverstone, they aimed to bring the visitor *inside* the museum "textual code" as never before.[8] Contemporary design attributes to exhibition – as a medium in itself – the role of an intermedia carrier, able to orchestrate a heterogeneity of media and languages working together towards a richer visitor experience. Sometimes the displayed object may be cinema itself (as the complex of machines and films), but often cinema and audiovisual products are "decomposed" into their fundamental units and reused in manifold ways (remixed, cut into scenes, dramaturgically "vampirized," etc.) to serve as an interpretation tool of other objects. Recent articles in *Curator: The Museum Journal* provide a range of interesting examples in this direction.[9] At MNST, too, categories like "multimedia," "interactive," and "audiovisual" exhibits have emerged during the last few years,[10] making a fixed theatrical vision obsolete. In this perspective, the end of the "movie theatre era" in the museum may appear to be a natural path.

This interpretation of the MNST hall's destiny implies two assumptions. The first is that the original purpose of having a cinema hall in the museum was to exhibit cinema as a technological fact – as this seems the only logical reason for a science museum to have a complete screening facility; the second assumption is that cinema usually coincides with the commonplaces of authorship and show circuits, more or less of a commercial nature. In our opinion, neither assumptions can fully explain why, from the 1950s onwards, such a great effort had been undertaken by the Museum to commission a famed pool of architects and build its own theatre, acting as an independent exhibitor of cinema.[11] If the original Museum's aim had been simply to display cinematography as one of the records in an encyclopaedia of inventions and discoveries – as Farinotti seems to imply – the whole venture seems a bit oversized.

However, Farinotti's memory dates back to the 1970s, when, according to a first examination of the Museum's rich archive, the hall's initial purposes seem to have faded, turning it into an ordinary second-run theatre, without a precise identity. Thanks to a brief account left by Orazio Curti, one of the protagonists in the first decades of the Museum's existence, we know that in the exact same years "audiovisuals" (videotapes, audio recordings) started to be used in the Museum's exhibits to explain the contents of the galleries to the visitors. Movies were created by the Museum's Technical Office, such as with *Macchine e motori*, a short documentary dedicated to the Engines gallery.[12] At that point, the original purposes of the so-called "Cinema Section" seems to have changed direction: the audiovisual materials had become more a technical and didactic matter than a curatorial act.

This essay explores the origins of the relationships between the MNST and the uses and practices of cinema inside it. We take into consideration a timespan beginning shortly before the opening of the Museum in 1953 and ending with the death of its founder, the industrialist and engineer Guido Ucelli (1885-1964), who was the general manager of Riva, a renowned factory that assembled turbines and water pumps. Looking at the international panorama, the literature exploring diverse forms of spectatorship connected to museums, or the circulation and uses of cinema outside the show business circuits – in educational, scientific, industrial, and cultural contexts – is growing, but many cases remain unexplored,[13] like the story of the Italian National Science Museum of Milan, designed in the 1930s and inaugurated in the 1950s.

In order to better understand the "strange" alliance between a science museum and cinema shows, we propose shifting the attention from a general topic – cinema in museums and exhibitions – to a specific situation: a science museum with a cinema theatre. The idea of establishing a national science and technology museum in Milan was an initiative by the Italian and – specifically – Milanese techno-scientific community of engineers and architects trained at the Politecnico in Milan.[14] Our attempt is to look under the present and immediately visible layers, in search of the deeper subjective vision represented by the theatre's material heritage: a concrete trace of an ancient practice of cinema constructed inside a museum born to represent this community.

On the one hand, our research found a relevant correspondence with the reflections about the materiality of cultural and communication practices, expressed now by the media archaeology approach.[15] On the other hand, we also adopted a "relational approach," as suggested by the science historian Jean-Baptiste Gouyon with respect to the history of scientific filmmaking.[16] This demands bringing into the picture a wide range of subjects – different kinds of cinema practitioners, museum curators, designers, scientists, audiences – in order to understand how they used the cinema device to relate to each other. Thus, we will explore the genesis and history of the MNST cinema theatre and screening programmes, considering the latter a kind of "software" for the theatre "hardware," and we will refer to everything together as the "MNST cinema project." Analysing the relationship between scientists and cinema, film historian Scott Curtis argued that the appropriation of cinema technology by groups of experts in different domains is based on the correspondence between their professional needs and the features of cinema as an enhancement of their own "mode of expert viewing."[17] We take the liberty of extending this concept from film production to film distribution and enjoyment. Fundamental questions emerge: What was the scenario in which science museum organizers like Ucelli approached cinema? And what kind of specific professional *viewing needs* have been expressed in the MNST cinema project?

Films, international exhibitions, and science museums: A "useful" relationship

Film historian Haidee Wasson has recently spoken of the "elastic and expanded museum," underlining the enduring relationship that has tied together museums and moving image technologies since at least the 1920s.[18] Already before, image projections – thanks to devices like magic lanterns, solar microscopes, reflectoscopes, and so on – were used in museums and scientific societies as popular educational entertainment.[19] As Wasson suggests, the new technological capacities have created a sort of new "media ecology" in the 20th century museum, which has encouraged "a kind of subgenre of curatorial activity, leading museum curators, educators, and publicity officers to innovate display techniques" through new media – from cinema to television.[20]

This is particularly true if we look at science museums. In this kind of institution, research and education are traditionally asked to coexist with audience entertainment and aesthetic pleasure. In many cases, planetaria and museums of natural history, science, and technology were established in connection with mass events such as world's fair exhibitions, which made substantial use of films and media to impress, entertain, and engage the audience.[21] This happened, for example, at the Century of Progress Exposition in Chicago (1933-1934), with the foundation of the Museum of Science and Industry, and with the Palais de la Découverte, which opened in Paris in 1937 on the occasion of the Exposition Internationale des Arts et des Techniques Appliqués à la Vie Moderne. International exhibitions increasingly sought to satisfy the demand for science dissemination and education of the masses by displaying dynamic models, replicas, footage, experiences, and demonstrations of subjects related to scientific research, technological innovation, and the history of science. In this way, they had a huge impact on science museums and the way the museums exhibited objects and artefacts to the general public. Museums had to let the masses in, to transform themselves "from a cemetery of bric-a-brac into a nursery of living thoughts."[22] The use of moving images was part of this strategy of innovating display techniques.

The fact that, since the second half of the 19th century, world's fairs largely contributed to the foundation and development of science museums is indisputable. With few exceptions, science and technology museums owe their existence to international exhibitions, which shaped their objectives and materially contributed to their creation.[23] In a period marked by profound transformations faced by science museums in the 20th century,[24] world's fairs' exhibits have had a positive influence on modern museums regarding design, use of film and media, and attracting audiences. While world's fairs struggled to be "indicators of modernity," the constant debate on the utopian "museum of the future" increased, starting from the very beginning of the 20th century and continuing through the interwar period, the postwar economic boom, and the Cold War.

As a relevant part of the "intricate relations among films, institutions and exhibition locations,"[25] during the 20th century, cinema entered large museums, scientific or otherwise – like the Metropolitan Museum of Art and the American Natural History Museum of New York, the Planetarium of the Deutsches Museum in München, the Musée de l'Homme in Paris, and the Science Museum of London – with a range of goals: to make museums a lively place, to propose rest from "museum fatigue," and to "direct the eye" above displayed collections.[26] In Italy, the Planetarium of Rome was inaugurated on October 28th, 1928, by Mussolini, which was a direct emanation of the Istituto Luce, the main producer of educational cinema in Italy established during the Fascist period, showing the profound ties between museums, pedagogy, science dissemination, and cinema.[27] In the same years, Ucelli began to plan his museum devoted to popularizing science and technology, visiting similar museums abroad, from the Deutsches Museum to the Science Museum. Even if the MNST was not the direct result of an international exhibition, its project was largely indebted to the international and Italian debate on the *lively* and *living* museum.[28]

A fruitful scenario in Milan: The museum meets the Politecnico

In order to understand the presence of a cinema hall in the MNST, it is important to briefly sketch the main objectives of this educational institution devoted to science dissemination. According to Ucelli, museums of science and industry

> *must not only be of interest to scholars, they have also to make clear and understandable to the masses, to the community, the ideals of science, the general problems of the availability and processing of raw materials, the specific problems of agriculture and industry, the real problems of production and labour organization; they have to celebrate the nobility of work, facilitating professional guidance; and they also have to give as much technical culture as possible to the people to promote progress and individual self-development.*[29]

The industrial museum planned by Ucelli was designed to present to the general public the manifold crafts and abilities of the industrious and ingenious *homo faber*, from up-to-date industry to traditional handcrafts. The Museum aimed to document through its collections the formation, development, and "progress" of science, technology, and industry, not through "dead relics" but rather through machines and instruments in action, replicas, models, original objects and prototypes, sounds, and cinema. In this sense, since the very beginning in the 1930s, it sought to impress visitors as a living and interactive museum, not just a repository of objects and collections. The Museum was conceived as a place for scientific education where visitors, especially the youngest, could experience and experiment with science themselves, in line with other major institutions of this kind. As a centre of modern life and polytechnic culture marked by rapid population growth, industrialization, and a rich network of vocational and technical schools, Milan seemed to be the perfect location for such a museum. Following München and Chicago, Ucelli wanted to establish an institution attended by different kinds of people: in the aftermath of World War II, building a cinema hall was part of this strategy. It is important to consider that, while Ucelli was struggling for the foundation of the Museum, a new Istituto di Cinematografia (ICPM) was established in 1948, in Milan, at the Politecnico, thanks to the initiative of the engineer and cinema expert Franco Monticelli (1905-1981), who was also a jury member of Venice Festival for the documentary section, and a member of the Italian Association of Scientific Cinema (AICS). The ICPM was later expanded by the young electrical engineer Achille Berbenni (1931-2013), who produced and directed scientific films of different kinds – engineering films but also ethnographic researches – and collaborated with the MNST on many occasions. The ICPM sought to develop research and academic teaching through cinema, with a special interest in civil and industrial engineering and architecture. Monticelli also promoted the creation of an archive of scientific films from Italy and abroad. The destinies of the Museum and the ICPM met several times.

Once the Museum was established in 1953, after a planning phase of twenty years, Ucelli was not alone in his effort to organize an independent cinema inside it. A group of engineers and architects from Milan's Politecnico was involved in the Museum's activities. They were able to act not only as men of science, but as filmmakers and museologists as well, using in synergy two media deeply involved with social practices: museum and cinema. Their interest was in the great potential of cinema as an effective tool for education, dissemination, and research in dialogue with other expertise and fields of knowledge, testifying to a strong visual culture and direct knowledge of cinematography within the Italian techno-scientific community during those years.

Ucelli himself was a fine amateur film-maker and producer. We know that he had been familiar with the Istituto Luce since 1928, when he engaged in the recovery of the Roman ships sunk in Lake Nemi, near Rome. This major archaeological challenge was also filmed with his help.[30] Thus, he was well acquainted with film as a medium for education and propaganda. It is not by chance that one of the most evocative and well-known

Italian industrial films, *Costruzioni Meccaniche Riva* (1957) by Ermanno Olmi, was commissioned by the Milanese company Riva when Ucelli was director. The architect of the MNST hall, Piero Portaluppi, a professor at the Politecnico in Milan, was also a prolific amateur filmmaker.[31] Another close collaborator of Ucelli, the engineer and president of Cinemeccanica (a leading company in the manufacture of film projectors), Francesco Mauro (1887-1952), was interested in cinema pedagogy and played a key role in the foundation of the Museum. After his death, Cinemeccanica took care of the MNST theatre acoustics and provided the 35mm projector.

Portaluppi, Mauro, and Ucelli were all involved in the life of ICPM from its beginning. This fact is attested by a 1951 document preserved in the historical archives of the Politecnico, reporting a meeting of the academic senate chaired by Portaluppi and containing a proposal for the ICPM scientific committee.[32] Mauro was the proposed president, but in the list of participants we also find the name of Ucelli next to eminent scholars like Enrico Fulchignoni – who besides being a cinema expert was a man of science, physician and UNESCO Film Commission officer – and documentary filmmaker Ubaldo Magnaghi, the former Luce's Didactic Section director. In the list there was also the name of Monticelli, the ICPM director and founder.

It was in this cultural and scientific Milanese *milieu* that the project of a cinema theatre inside the new Museum was conceived.

The birth of the MNST cinema project

The first account of the MNST cinema project can be found in 1952 in a letter by Ucelli to Portaluppi.[33] MNST board documents, dated December 31st, include the idea as follows:

> *a huge hall for cinematographic screenings of cultural and educational movies (dedicated to the noble themes of arts, science, technique, travels, discoveries, inventions, scientists' and pioneers' biographies, etc.).*[34]

In February 1953, the Museum opened, but the hall was still unfinished. The following year, Ucelli and several collaborators (we found the names of Pia Albertazzi Bossi, Giorgio Buridan, Alfonso Ginella, Federico Morelli, Giancarlo Zipoli)[35] worked to define the project in both operational and conceptual terms, gathering documents and information as well as meeting with academic and cinematography experts.[36] For example, they got in touch with representatives of Istituto Luce and the Venice International Film Festival, two of the most relevant institutions in Italy that could provide credit and support for embracing the cultural and educational side of cinema. Ucelli asked the Luce commissioner Tommaso Fattorosi, to whom he was already acquainted, to provide the MNST with their documentary films, starting an intense collaboration with the institute (fig. 16).[37] In the summer of 1953, the Venice Festival director Antonio Petrucci advised Ucelli about creating an "unprecedented" film archive inside the new museum, getting science and educational film from abroad, to provide for the Italian universities.[38] The suggestion was received, although never acted upon,[39] but the episode shows the MNST as involved in the Italian debate about cinema and education after World War II. This topic has been recently explored in respect to both the adoption of cinema as an academic discipline and the use of cinema as an educational asset in science and other domains.[40] The MNST library preserves several books dating from those years, revealing Ucelli's and his collaborators' interests: educational cinema, the relationship of cinema and society, scientific cinema, the industry and technology of cinema, and cinema and pedagogy.[41] The MNST archives preserve many newspaper clippings about the same topics. In November 1953, Ucelli went to Rome to meet Remo Branca, director of Public Education Ministry film archive,[42] and Luigi Volpicelli, director of the Pedagogy Institute of the University of Rome, who was especially interested in film education and who had invited the Milanese industrialist for a meeting after hearing about his cinema project.[43]

On April 13th, 1954, the MNST theatre building was officially inaugurated in the presence of the Italian President Luigi Einaudi, but regular screenings started in the autumn. Newspapers like *Corriere della Sera* highlighted the fine technical outfitting and the small-gauge projection system. In the first months, about thirty educational titles from a variety of cultural and institutional partners were chosen by the curators for screenings in museum.[44] In December 1954, the cinema hosted the international festival *Film per la Gioventù*, organized by the politician and children's rights activist Mary Tibaldi Chiesa, who in those years claimed the need for cinema shows dedicated to childhood. She found in Ucelli an attentive listener.[45] The year 1954 ended with a replica of the entire programme of the international documentary film festival proposed by the Istituto Luce at the Rome Planetarium, which was obviously a relevant reference for the MNST.

On January 1st, 1955, the cinema reviewer Arturo Lanocita wrote enthusiastically in the *Corriere della Sera* that Italy had its own "cinebref."[46] He underlined the correspondence between the original proposals made by the new cinema theatre and the industrial and scientific role of Milan. Lanocita welcomed a place dedicated exclusively to the neglected genre of documentary cinema, that to Italian audiences represented "the poor brother of fiction cinema, often considered with suspicion."[47] A few months later, Walter Alberti, conservator of the Cineteca Italiana of Milan, the famed film archive founded in 1947, stated that Milan was the "capital of scientific cinema" and hoped that the MNST would become a leading institution for this field by promoting documentary films and facilitating meetings of experts.[48] Indeed, in the first years of the MNST hall activity, programmes consisted almost exclusively of documentary films. But in 1960, the screening programmes started to include fictional and *auteurs*' movies as well. Films were always proposed in retrospectives, dealing with current topics, ranging from contemporary cinematography (for instance, in 1961, French Nouvelle Vague titles and Japanese films were screened) to social themes, like women's and youths' conditions (figg. 17-18). Even with *auteurs*' movies, the perspective adopted by the curators of the Cinema Section continued to be "documentary" and "scientific," as one of them, the film critic Buridan, declared in 1962 to justify the new entries:

> *Why not enlarge the original cultural action, since the diffusion of cinema in the modern world is related to every aspect of human knowledge, and thus it is a scientific fact, in larger sense of knowledge diffused to benefit the masses?*[49]

Buridan explained that the Cinema Section had to seek a delicate balance in defining the identity of a place that should be neither an elitist cine-club nor a commercial theatre. For them, the focus was not only cinema *per se* but also cinema in a scientific environment. A museum dedicated to this topic might appear to lay persons "irksome, distant and by any means difficult,"[50] but the hall and its cinema programmes – freely accessible with the museum ticket – could be a gateway to approach it easily. The MNST explicitly adopted the *cinéma d'essai* label in 1960, several months before the opening of the cinema hall *Arti*, the first official *essai* theatre in Milan, in February 1961.[51] But the search for a close relation with the scientific domain gave a special identity to the MNST theatre, making it distinct from similar venues.

The frame of *useful cinema* fits the MNST project well. Cinema – as a multifaceted practice – was clearly adopted by the MNST as a "tool that […] *does* something,"[52] rather than mere museum content in the cinematic form, or mere entertainment. The focus on the "native" documentary nature of cinema, without any regard to film genre, was consistent with the scientific approach to cinematography, as both a technology and a communication medium. Historians of science have started quite recently to study the relationship between cinema and science, while visual studies of science are still a developing field in which static images receive more attention than moving images. Nevertheless, works in this field are gradually revealing how multifaceted this relationship could be.[53] On the one hand, it is relevant to the study of the public culture of science; on the other hand, it is meaningful to the history of research practices involving the use of moving images as a tool of knowledge production.[54]

Documentary cinematography's innate "tension between artifice/entertainment on one side, and evidence/science on the other"[55] is of great relevance in the context of scientific and educational practices. The imprecision[56] of the cinema and science relationship has been debated by educators, cinematographers, and scientists since cinema's inception, in a perennial quest for a fragile balance that, in the "serious context" of scientific culture, justifies the use of something perceived culturally as popular entertainment – whereas, in the traditional view, "authentic" science is circulated throughout written texts, and other forms of expression have ancillary value.[57]

The science museum introduces a "third factor" to this relationship, offering the opportunity to present cinema as a scientific attraction and a research product in a consistent environment. The very first film screened at the MNST theatre, on October 3rd, 1954, is rather iconic of the curators' choices. *Sesto Continente* was the first work of the 24-year-old Folco Quilici. The director had taken part in an important scientific mission to the Red Sea, the *Spedizione Subacquea Nazionale*.[58] He filmed the mission in colour, and the movie became an "experiment" both in the fields of cinema and zoology. *Sesto Continente* had first been screened at the Venice Festival in August 1954. The interdisciplinary teamwork that created the movie did not go unnoticed by reviewers, who emphasized the different backgrounds of the professionals involved (scientists, explorers, filmmakers, athletes) as well as the artistic and cultural value of their product, pointing out that there were at least *two* notable aspects of the expedition: a huge collection of rare marine samples and 70,000 metres of film, the latter of which can be considered the analogue of the samples, but in iconic terms.[59]

Cinema presented itself to science practitioners as a powerful and double-faced instrument that allowed for "science-making in public"[60] and introduced aesthetic experiences *inside* the scientific domain. This was always associated with the danger of compromising the scientific rigour of knowledge produced and disseminated through cinema, as many in those years recorded an "ontological uncertainness looming over scientific and didactic cinematography."[61] Public discourse about this ambivalence was proposed by one of the most interesting episodes in the history of the MNST theatre at the beginning of the 1960s.

The art and science of cinema: The MNST and the Mostra Internazionale del Film Scientifico Città di Milano (1960-1962)

The Mostra Internazionale del Film Scientifico Città di Milano (hereafter "Mostra") was an international science film festival organized three times between 1960 and 1962 (fig. 19). This event can be considered an apex of the cinematographic culture expressed by the Milanese techno-scientific community in the MNST theatre.[62] It was a meaningful occasion in which the constellation of cultural instances behind the MNST theatre emerged with completeness and clarity. The main promoter and organizer of the Mostra was the ICPM. Berbenni, the young festival director, selected and gathered scientific films from all over the world, while the MNST Cinema Section curated the exhibition catalogues and the Circolo Universitario Cinematografico Milanese (CUCMI, the students' cinema association) managed the press office. Each year during the festival, the MNST theatre screened an average of 75 films from different countries all over the world, including areas such as Eastern Europe, Africa, and Asia. The three catalogues report a great variety of subjects in the programmes, including medicine, technology, natural sciences, biology, microbiology, geography, ethnography, arts, chemistry, and physics.[63] The screening calendars culminated with a day dedicated to a special "genre," the "cine-research" movies.

The Mostra responded to different aims. First, it represented the full accomplishment of Ucelli's programme for the MNST. The variety of subjects echoed the museum founder's first words about the cinema project, and confirms that, to the community of cinematographer-engineers at the Milan Politecnico, "science films" were not simply films *about* science – just as to the Museum Cinema Section, scientific cinema was not simply "documentary film." Secondly, according to Berbenni, the exhibition also aimed to contribute in the definition of "scientific film,"[64] matching the normative effort that in those years animated the activities of scientific cinema associations in Europe.[65] At the time, the debate about the scientific and educational nature of documentary cinema was spreading in Italy as well, involving experts like Enrico Fulchignoni, Luigi Chiarini, Béla Balázs, Giuseppe Flores d'Arcais, and Luigi Volpicelli.[66] Ucelli was acquainted with many of them. The Mostra was the Milanese reply to the more famous *Rassegna del cinema internazionale scientifico-didattico* initiated in 1956 by the University of Padua.[67] By creating the programmes, Berbenni intended to propose a grading scale of scientific content in films, in which the lower step was represented by films that generically inform the public and the higher level by cine-research films that were produced in a laboratory environment for research use. In the middle was the huge world of didactic films, made explicitly for use in classrooms.[68]

Historians of pedagogy argued that, in Italy, the idea of using cinema in education was a challenge to the neo-idealistic background of many pedagogists because it subverted an implicit hierarchy, putting artistic expression above the techno-scientific world involved in the material production of this kind of film. According to Giovanni Rizzo, in the 1950s and 1960s, educators were almost obsessed by the constant need for assessing whether in didactic films cinematography was used as an "expressive" or a "mechanical" means of reproducing reality, in term of their effectiveness in teaching. That both approaches could be effective – and that practically they could not be separated – was not an obvious concept.[69] Berbenni went further. In the conclusion of a technical article about the use of ultra-rapid cinematography in scientific research, he argued that the moving image obtained in this way "enlarges our curiosity domain, and poses new questions to the knowledge of nature and mankind."[70] Spiritual elevation becomes a by-product of laboratory activity, by means of a scientific instrument conceived to make measurements, enhancing our observation faculties. And *observation* is the key concept that links cinema and museum as media in a scientific perspective, as Ucelli had made clear a few years before.[71]

In July 1958, the general conference of the International Council of Museums (ICOM), under the auspices of UNESCO, was held in Brussels on the occasion of the Expo 1958 and was dedicated entirely to *Museum, Film and Television*. In the context of the first postwar international exhibition, the world of museums met once again with the world of moving images. The conference represented a turning point in the international debate about the complex relationship between museums and new media, aimed at the encounter between different professions: producers, film reviewers, museum experts, and film authors. In the final recommendations, the committee asked mainly for the realization of more films devoted to museums, seeing films as a powerful form of advertisement, and the creation of film collections inside museums.[72] Ucelli was there, as a member of the Italian ICOM, together with Fulchignoni and the film critic Mario Verdone. Ucelli's experience was evident in his talk, as he pointed out that in museums "the learning function should spontaneously flow from the observation of collections, single objects and experiences."[73] Thanks to scientific films, youths were able to understand "concepts and relations difficult to access," being encouraged to "personally repeat demonstrations and experiments in museum laboratories."[74] Finally, Ucelli expressed the hope that educational and scientific films could find their place in "normal cinema theatres."[75] To Ucelli, cinema was thus an exceptional museum exhibit, while the scientific and educational value of films was enhanced by spectacular enjoyment.

Berbenni matched Ucelli's concepts, stating that, in scientific and educational films, viewers should be engaged by a "spectacularity" that should "*flow fresh and spontaneously* from the source of amazement that any phenomenon hides."[76] Films can effectively teach when they provide "precise and typical *discoveries*, loyal presentations of reality that you cannot *observe* in other manners, when the unavoidable dramatization – actually rather useful, even in didactic films – does not become a frivolous distraction."[77]

Berbenni's evaluating criteria for scientific films included "adequateness"[78] of cinematic language as well as scientific soundness. He indicated an intermediate terrain, in which the cinematographic medium should be neither just at the service of science nor a mere self-referring spectacle. In this way, he seemed to pursue a poetics of the cinematographic medium *as a* scientific instrument. A decade earlier, his mentor master Monticelli had already argued that if "between the man of science and the man of cinema there is an abyss preventing reciprocal understanding," perhaps, "the sole manner to overcome this dualism is that the man of science becomes, or even is, a man of cinema."[79]

On the one hand, an experience like the Mostra showed that, through the cinema, the museum can expand the association between education, spectacle, and amusement that typically defines this kind of institution. On the other hand, the museum was an ideal frame to legitimize the scientific filmmakers' claim that their work was "cinema" as much as the other cinema. This demand delineated a specific domain of aesthetic expression that belonged to scientific filmmakers. Berbenni used the Mostra to showcase influential examples, such as the Institut für den Wissenschaftlichen Film of the German University of Göttingen or the Institut Française de Cinématographie Scientifique in Paris directed by Jean Painlevé. By projecting titles like *Eleutheria* by Painlevé, *Brut Biologie des Schwarzspechtes* by the Institut für den Wissenschaftlichen Film Göttingen,[80] *Photographic Study of Sympathetic Initiation of Explosive Charges* by Morton Sultanoff, *Il ragno rosso volterrano* by Ferdinando Baschieri, *La lumière polarisée appliquée aux objects isotropes* by Jean Paul Girard, or *Le cure parentali* by Virgilio Tosi – together with movies like *Cenacolo di Andrea Castagno* by Carlo Ludovico Ragghianti, or *Alberto Burri* by Giovanni Caradente – inside the "living museum" set by Ucelli, the Milanese engineers aimed to fulfil the desire of a solid balance between seriousness and educated entertainment, as well as scientific rigour and aesthetic emotion, promoting a "scientific way" of going to the movies.

The Mostra experience was brief but left its heritage to the theatre. Starting in 1966, each Monday evening, the MNST theatre offered free screenings of scientific films. In 1968, the MNST participated in organizing the *Settimane del film scientifico* thanks to Berbenni, who had become director of the local section of the Associazione Italiana del Film Scientifico. In 1971, the Museum hosted the first annual international festival *La natura, l'uomo e il suo ambiente*.[81]

Conclusions: The MNST cinema hall as a common ground

Farinotti's memory provides a valuable hint in order to understand how the presence of a regular cinema theatre in a *science* museum is mainly related to a special viewing experience. The novelty of the MNST cinema project consisted in exactly this, which may appear obsolete to our contemporary gaze: the search for a theatrical regime. This can be understood only by considering the hall artefact together with the intangible heritage of the practices and ideas that animated this space.

In those years, pedagogists taken into consideration by Ucelli – like Volpicelli and Evelina Tarroni – argued that the emotional power and the aesthetic experience of spectacular cinema should be a matter of education as much as the film content.[82] Teachers should educate "*through* films and *to* films." Volpicelli also thought that film "sterilization" from theatrical vision in learning contexts was an obsolete approach.[83]

Scientific and educational cinema shows were commonly associated with portable cinema and small gauges. In this regard, before the war, Francesco Mauro already hoped that "cinema apparatus should not go to classrooms; pupils should go to the cinema apparatus in a suitable room"[84] in order to develop the scientific and didactic uses of cinematography. In the MNST theatre, a fixed 16mm projector was put alongside the 35mm machine.[85] In historical photos, the screen appears to be huge, guaranteeing an immersive experience, but shaped with a 4:3 ratio, matching current recommendations for the best visual learning experience in the scientific domain (fig. 15).[86]

Historical studies about visual, interactive, and cinematic displays in museums have shown the variety of uses, shapes, and scopes adopted since the 19th century: they may include, or not, forms of theatrical vision, and they are in constant dialogue with the outside media experience of their age.[87] Ucelli recognized the relevance of the contemporary popular experience of spectacular cinema, and aimed to reproduce theatrical vision in an "unusual" context: scientific cinema. Farinotti appropriately uses the adjective "mimetic," catching the spirit: the MNST theatre was a comfortable and enjoyable space where scientific attitude towards cinema could be *bodily* experienced in the same way people experienced "normal" cinema. A nice bar installed in front of the hall's main entrance reinforced the analogy. To Ucelli and his collaborator, this mimesis allowed for integrating the popular phenomenon of cinema – first of all as a show – inside a museum that should be perceived as a serious cultural institution just as the other museums, or even more, since it was "scientific." The eternal ambiguity of documentary cinema between education and entertainment is amplified by its insertion into the meta-level of the science museum, an institution subjected to very similar issues.[88] Ucelli was firmly convinced that museums should educate "with methods that differ totally from school institutions" and use any mean to attract audiences, as he stated in 1958 during the ICOM Conference in Brussels. Paraphrasing Monticelli, the engineer and industrialist Ucelli also became a "man of entertainment" in order to pursue its cultural scope.

After all, from an "engineer-filmmaker-museologist" perspective, the thin line separating cinema as entertainment and cinema as a techno-scientific system was almost irrelevant, even if that consideration was not so obvious to many contemporary observers. It is interesting that Ucelli wanted to insert a section dedicated to the technology of show business since the Museum was first planned.[89] In 1962, the Photo-Cinematography Gallery was inaugurated next to the theatre's upper entrance, providing a historical introduction to cinema technology, just a few steps before immersing visitors in the cinema "enchantment." From their point of view, Ucelli and the other engineers were well aware that in producing the "magic" of cinema, "among the filmmakers, stars and effect wizards [there] are also a host of architects and designers, theatrical technicians, electrical engineers, ambitious entrepreneurs."[90]

Our research is limited to the years of Ucelli's presidency, and it took into consideration only a small part of the huge heritage of artefacts, documents, and letters preserved in the museum collections, not to speak of the relevant testimony provided by the editorial activities of the Cinema Section, which also established in 1960 the periodical magazine *Museoscienza* – an expansion of the former leaflets that reported the cinema programmes.[91] The first results encourage further exploration and the enlargement of the theoretical frame, as if this were not only a case of a special cinema-museum relationship but also a larger case that includes media, scientific culture, and museology.

We must acknowledge the relevance of the *Cinema Without Names* framework, in which multifaceted and unconventional cases, like the MNST project, can emerge in the history of cinema and show their significance. Moreover, according to our sectorial bias, media archaeology is a useful perspective. It seeks the fundamental contribution of museum collections as historical sources, focusing on their materiality,[92] and it is also effective in creating common ground with the sociological approach to media – as a technology – intersecting with the framework of Science and Technology Studies (STS).[93]

This setting is also functional to the practical work of the MNST's present curators, since it allows for unveiling new layers of significance in imagining contemporary uses of historical artefacts – for example, in this case, the "new" auditorium – and shaping the identity of the place in unique ways. At the same time, this case study represents a tremendous convergence through which different expertise and fields of study can meet and dialogue: the histories of science, media, and education; aesthetics, and museology. As argued by Silvio Alovisio and Paolo Bianchini, in order to better understand the relationship between cinema and education, we need an interdisciplinary perspective intersecting the history of cinema with the history of pedagogy. Inter-media scenarios are also relevant. Thus, the museum can be considered another *medium* interacting in the relationship. Its inclusion in the cinema-education dyad also presents the chance to gain more information about audiences.[94]

The Milan museum cinema hall provides different angles and perspectives on scientific and educational cinema and the history of media technologies, giving voice to the singular point of view of the Milanese engineers community.

Illustrations

15. The cinema hall designed by Piero Portaluppi at the Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci," Milan, in the 1960s. Archivio Storico Museo Scienza.
16. Movies hunger. The Museum president Guido Ucelli writes to Istituto Luce: "Documentary films out of stock. Urgent delivery for next Tuesday," 1955. Archivio Storico Museo Scienza.
17. Leaflet for a retrospective of musical movies emphasizing the technical side ("Soundtrack"). Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci," Milan 1962. Archivio Storico Museo Scienza.
18. Two retrospective leaflets: "Kids are looking at us" and "Man and the sea." Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci," Milan 1962. Archivio Storico Museo Scienza.
19. Mostra Internazionale del Film Scientifico (International Scientific Film Exhibition), Milan, catalogue of the second festival, 1961. Archivio Storico Museo Scienza.

Notes

[1] The essay is the result of shared and collaborative work. However, Simona Casonato is responsible for the general setting, and for the parts related to cinema history and media theory (mainly sections 4 and 5), while Elena Canadelli is responsible for the parts related to the history of science museums and the Milan techno-scientific milieu (mainly sections 2 and 3). All translations are ours.

[2] The Museum changed its name in 2000, shifting from *tecnica* to *tecnologia*. Now it is named Museo Nazionale Scienza e Tecnologia "Leonardo da Vinci." We will use MNST as abbreviation for both former and current names.

[3] In many historical documents (reports, articles, letters) the seats number is different. There is no consistence among them. We decided to give credit to the latest technical document that we were able to find, *Ristrutturazione della sala cinema/auditorium. Relazione tipologica e strutturale del bene, cenni storici*, MNST internal document, 27 August 2001.

[4] Timetables varied over the years. For example, we report the opening hours in 1962: Wednesday to Friday, 3 p.m. – 7 p.m. and 8 p.m. – 12 a.m.; Saturday, Sunday and holidays, 2 p.m. – 12 a.m.; Tuesday 7.30 p.m. – 12 a.m.; closed on Mondays; see *Museoscienza*, no. 12, September 1962.

[5] On June 21st,1980, the museum board decided to cease the activity for budgetary reasons. See Archivio Storico Museo della Scienza e della Tecnica di Milano (from now on ASMUST), Archivio Museo, Didattica, Cinematografia, Programmazione e pubblicità, b. 53; *Verbale Consiglio Amministrazione*, 21 June 1980 (excerpt) and *Ristrutturazione della sala cinema/auditorium*, 27 August 2001. Accounts of the cinema's openings after the official closure – for instance for school screenings – have been provided by personal memories of former employees.

[6] Luisella Farinotti, "Lo sguardo intrappolato," in *8½*, no. 13, March 2014, p. 21.

[7] *Ibidem*.

[8] Roger Silverstone, *Il medium è il museo. A proposito di oggetti e di logiche, in tempi e spazi*, in John Durant (ed.), *Scienza in pubblico. Musei e divulgazione del sapere*, CLUEB, Bologna 1998, p. 79.

[9] See, for instance: Tara Chittenden, "The Cook, the Marquis, his Wife and her Maids: The Use of Dramatic Characters in Peter Greenaway's Peopling the Palaces as a Way of Interpreting Historic Buildings," in *Curator: The Museum Journal*, vol. 54, no. 3, July 2011, pp. 261-278; Lara Hourston Hanks, "Narrative, Story, and Discourse: The Novium, Chichester," in *Curator: The Museum Journal*, vol. 58, no. 1, January 2015, pp. 27-39; Jihoon Kim, "Stanley Kubrick in the Museum: Post-cinematic Conditions, Limitations, and Possibilities," in *Curator: The Museum Journal*, vol. 60, no. 4, October 2017, pp. 467-487; Ed Lantz, "Planetarium of the Future," in *Curator: The Museum Journal*, vol. 54, no. 3, July 2011, pp. 293-312; Santos M. Mateos-Rusillo, Arnau Gifreu-Castells, "Transmedia Storytelling and Its Natural Application in Museums: The Case of the Bosch Project at the Museo Nacional del Prado," in *Curator: The Museum Journal*, vol. 61, no. 2, April 2018, pp. 301-318.

[10] This is also something Simona Casonato has directly experienced, as she's been dealing with interactive and audiovisual production in the exhibition design department of MNST since 2003.

[11] In the 1950s, the most prestigious commercial theatres in Milan had between 1,000 and 2,000 seats, and were carefully decorated by specialized architects; see Matteo Pavesi, *Consumo ed esercizio cinematografico dal secondo dopoguerra ai giorni nostri*, in Raffaele De Berti (ed.), *Un secolo di cinema a Milano*, Il Castoro, Milan 1996, pp. 312-359. The MNST hall, with its 350 square metres, was not very large, but it is possible that the fame of the architects, its central position, and the obsessive care for details (documented in the correspondence between Ucelli and Portaluppi preserved in the MNST archives) made it a prestigious location in the Milanese panorama.

[12] Orazio Curti, *Un museo per Milano*, Anthelios Edizioni, Milan 2000, p. 109.

[13] See, for instance, Alison Griffiths, *Shivers Down Your Spine: Cinema, Museums and the Immersive View*, Columbia University Press, New York 2008; Charles Acland, Haidee Wasson (eds.), *Useful Cinema*, Duke University Press, Durham-London 2011. Silvio Alovisio and Paolo Bianchini argued that "useful cinema" is still a largely unexplored topic in Italy; see Silvio Alovisio, Paolo Bianchini, "Sul cinema educativo in Italia: teorie, istituzioni e personalità dalle origini agli anni Cinquanta," in *Immagine: Note di storia del cinema*, no. 11, 2015, p. 7.

[14] Paola Redemagni, *La nascita del museo*, in *Guido Ucelli di Nemi, industriale, umanista innovatore*, Hoepli, Milan 2011; Elena Canadelli, "Le macchine dell''ingegnere umanista'. Il progetto museale di Guido Ucelli tra Fascismo e Dopoguerra," in *Physis: Rivista internazionale di storia della scienza*, vol. 51, nos. 1-2, 2016, pp. 93-104.

[15] Giuseppe Fidotta, Andrea Mariani (eds.), *Archeologia dei media: Temporalità, materia, tecnologia*, Meltemi, Milan 2018; Diego Cavallotti, Simone Dotto, *Notizie dagli scavi: altre prospettive per l'archeologia dei media*, in Giuseppe Fidotta, Andrea Mariani (eds.), *Archeologia dei media: Temporalità, materia, tecnologia*, cit., p. 36.

[16] Jean-Baptiste Gouyon, "Science and Film-Making," in *Public Understanding of Science*, vol. 25, no. 1, 2016, pp. 17-30.

[17] Scott Curtis, *The Shape of Spectatorship*, Columbia University Press, New York 2015.

[18] Haidee Wasson, *The Elastic Museum: Cinema Within and Beyond*, in Michelle Henning, *The International Handbook of Museum Studies*, vol. 3 *Museum Media*, Wiley & Sons, London 2015, pp. 603-627.

[19] Alison Griffiths, *Shivers Down Your Spine: Cinema, Museums and the Immersive View*, cit.; Emily Hayes, "Geographical Light: Debating and Adopting the Magic Lantern at the Royal Geographical Society c. 1870-1888," in *Journal of Historical Geography*, forthcoming. We will not make reference here to the interesting history of uses of magic lanterns in schools and their comparison with animated images, which would exceed the limits of this study. Among others, on this topic see Silvio Alovisio, "Cinematografo o produzioni luminose? Immagini fisse ed animate nel primo dibattito italiano sulle produzioni educative," in *Immagine: Note di storia del cinema*, no. 11, 2015, pp. 61-103; Silvio Alovisio, *La scuola dove si vede. Cinema ed educazione nell'Italia del primo Novecent*o, Kaplan, Torino 2016.

[20] Haidee Wasson, *The Elastic Museum: Cinema Within and Beyond*, cit., p. 603.

[21] It is safe to say that over the past twenty-five years, the literature on the history of universal exhibitions has steadily increased. Among scholarly publications, we mention here only a couple of works dealing with exhibitions as exhibitionary media in relation to museums: Elena Canadelli, Marco Beretta, Laura Ronzon (eds.), *Behind the Exhibit: Displaying Science and Technology at World's Fairs and Museums in the Twentieth Century*, Smithsonian Institution Scholarly Press, Washington, DC forthcoming; Luca Massidda, *Atlante delle grandi esposizioni universali: Storia e geografia del medium espositivo*, FrancoAngeli, Milan 2011.

[22] The quotation is from G. B. Goode, in 1901, as quoted in Robert W. Rydell, *World Fairs and Museums*, in Sharon Macdonald (ed.), *A Companion to Museum Studies*, Blackwell Publishing, Malden (MA) 2006, p. 139.

[23] Donatella Capaldi spoke of a "world fair medium" shaping museums at the beginning of the 20th century. See Donatella Capaldi, *Il Museo Elettronico. Un Seminario con Marshall McLuhan*, Meltemi, Milan 2018, p. 13.

[24] Karen A. Rader, Victoria E. M. Cain, *Life on Display: Revolutionizing U.S. Museums of Science & Natural History in the Twentieth Century*, The University of Chicago Press, Chicago 2014.

[25] Charles Acland, Haidee Wasson (eds.), *Useful Cinema*, cit., p. 13.

[26] Haidee Wasson, *Big, Fast Museums/Small, Slow Movies: Film, Scale, and the Art Museum*, in Charles Acland and Haidee Wasson (eds.), *Useful Cinema*, cit., p. 190.

[27] Fiamma Lussana, "Cinema 'educatore': Luciano De Feo direttore dell'Istituto Luce," in *Studi storici*, no. 4, 2015, pp. 935-961; Francesco Paolo De Ceglia, "From the Laboratory to the Factory, by Way of the Countryside: Fifty Years of Italian Scientific Cinema (1908–1958)," in *Public Understanding of Science*, vol. 21, no. 8, 2011, pp. 949-967. A specific but interesting case study of these years (described by Giovanni D'Amia, Andrea Mariani, "Le Manifestazioni Internazionali di Cinematografia Scientifica e Turistica a Como (1936–1937)," in *Immagine: Note di storia del cinema*, no. 15, 2017, pp. 85-111) is the *Mostra internazionale del documentario turistico e scientifico di Como*, which presented a documentary and experimental film retrospective linked to an exhibition about cinema.

[28] See the forthcoming essay by Canadelli, in *Behind the Exhibit: Displaying Science and Technology at World's Fairs and Museums in the Twentieth Century*, cit. and Geert Somsen, "Science, Fascism, and Foreign Policy: The Exhibition 'Scienza Universale' at the 1942 Rome World's Fair," in *Isis*, vol. 108, 2017, pp. 769-791.

[29] Guido Ucelli, *Il Museo industriale di Milano*, 10 December 1941, typescript available in the Library of the National Museum of Science and Technology of Milan. On the aims of the Milan Museum see also Guido Ucelli, *Il Museo nazionale della scienza e della tecnica sede*

della Mostra ordinata nel V centenario della nascita di Leonardo da Vinci, in *Leonardo. Saggi e ricerche*, Istituto Poligrafico dello Stato, Rome 1954, pp. 87-111 and *5 anni del Museo*, Alfieri e Lacroix, Milan 1958.

[30] ASMUST, Archivio Museo, Didattica, Cinematografia, Progetto, b. 1, letter by Ucelli to Tommaso Fattorosi, 22 December 1950; Paola Redemagni, *La nascita del museo*, cit.

[31] See the film by Maria Mauti, *L'amatore*, produced by Pietro Maranghi, MP1, Italy 2016.

[32] Historical Archives Politecnico di Milano, b. SEG X, fasc. 100, Composizione della Commissione consultiva per l'Istituto di Cinematografia.

[33] ASMUST, Archivio Museo, Corrispondenza II Serie 1946-1980, b. 203, letter by Ucelli to Portaluppi, 17 November 1952.

[34] ASMUST, Archivio Museo, Organi di Gestione Consiglio di Amministrazione, Libro Verbali no. 2 1951-1959, Administration Board Report of 31 December 1952 (our emphasis).

[35] It is likely that in such an ambitious project Ucelli had been helped. Most documents and letters are signed by Ucelli in person, but a few names emerge occasionally from the Museum archives. Albertazzi Bossi was presumably a math and physics teacher passionate about cinema; Buridan was a drama writer and cinema reviewer; Ginella was the communication officer and the manager of the cinema activities; Morelli was head of the MNST administration; Zipoli was the MNST general superintendent. Regarding Giorgio Buridan, we have supplemental information. He was an outstanding figure, and his main contribution was in film criticism. He had collaborated with the national broadcast network RAI as author and radio speaker; he was also acquainted with Maria Adriana Prolo, whom he helped with her archiving activities. His war journal (he was a partisan during WWII) has been recently published (Giorgio Buridan, *In cielo c'è sempre una stella per me: Diario di una guerra partigiana*, Tararà, Verbania 2014). We are grateful to the book's editor, Maria Silvia Caffari, for her precious help.

[36] Folders in the MNST historical archive contain dozens of interesting letters, to and from a huge variety of correspondents, like cinema producers of any kind – from small independent filmmakers to Hollywood majors – directors, cinema archive professionals, professors and teachers, government officers, politicians, writers, industrialists, journalists, and so on.

[37] In 1950, Ucelli proposed updating the Luce documentary about the Nemi enterprise by adding new materials that he would have produced *ex novo* (letter by Ucelli to Fattorosi, 1950, cit.).

[38] ASMUST, Archivio Museo, Didattica, Cinematografia, Progetto, b. 1, letter by Giancarlo Zipoli to Ucelli, 26 July 1953.

[39] In several letters from those years, Ucelli discussed the possibility of establishing a specialized cinema archive at the Museum. In 1956, he sought safety and legal information, and, in January 1958, an architectural plan for the museum building expansion showed a new "film archive" building to be annexed (ASMUST, Archivio Museo, Amministrazione, Edilizia e storia dell'edificio 1908-[1990], b. 17). About 200 films remain in the Museum collections. They are not fully studied yet, but they apparently respond to Petrucci's idea only in part. It is more likely that they are remains of the theatre's daily activity. See Simona Casonato, "Film perduti: *La grande strada*. Storia del ritrovamento della versione italiana," in *Alias*, *Il Manifesto*, 14 November 2015, p. 4.

[40] The relationship between cinema and education in the first half of the 20th century has been researched rather intensively in the last years (mainly thanks to Silvio Alovisio), but fewer titles explore the years after WWII. Among these, we cite David Bruni, Antioco Floris, Massimo Locatelli, Simone Venturini (eds.), *Dallo schermo alla cattedra. La nascita dell'insegnamento universitario del cinema e dell'audiovisivo in Italia*, Carocci, Rome 2016; Erica Buzzo, *La rassegna internazionale del film scientifico-didattico dell'Università di Padova (1956–1975)*, PhD Thesis in Storia e Critica dei beni artistici, musicali e dello spettacolo, indirizzo Cinema, Università degli Studi di Padova, 2013, http://paduaresearch.cab.unipd.it/5552/2/Buzzo_tesi.pdf, last visit 9 June 2018; Giovanni Rizzo, *Le forme del cinema per l'educazione. Il panorama italiano dagli anni '50 ad oggi*, FrancoAngeli, Milan 2014; Silvio Alovisio, Paolo Bianchini, "Sul cinema educativo in Italia: teorie, istituzioni e personalità dalle origini agli anni Cinquanta," cit.

[41] We mention only a few interesting examples: Remo Branca, *Polemiche sul cinema*, Istituto Propaganda Libraria, Milan 1943; *Atti e relazioni della 1a Settimana per il cinema educativo*, Milan, 1-8 June 1947; P. Thevenard, G. Tassel, *Le Cinéma scientifique français*, préface de Jean Painlevé, Jeune Parque, Paris 1948; Evelina Tarroni, Sandro Paderni, *Cinema e gioventù: studio degli aspetti sociali e dei motivi d'interesse*, Istituto di Pedagogia dell'Università di

Roma, Rome 1952; Antonio Mura, *Scuola attiva e cinema*, Cineteca Scolastica, Rome 1952; Remo Branca, *La scuola e il film: criterio e limiti della cinedidattica*, Istituto Padano di Arti Grafiche, Rovigo 1952; Jean Painlevé, *Cinema et recherche. Conference faite au Palais de la découverte le 22 octobre 1955*, Palais de la Découverte, Paris 1956.

[42] The archive was judged "poor" by Ucelli; see ASMUST, Archivio Museo, Didattica, Cinematografia, Progetto, b. 1, letter by Ucelli to Remo Branca, 12 November 1953, and, in the same folder, a memorandum sent by Ucelli to Gaetano Napolitano, 25 January 1956. Giovanni Grasso explored the life and ideas of Remo Branca, an influential and controversial protagonist of the relationship between cinema and education in those years; see Giovanni Grasso, "Il ventennio del cinedidatta. Remo Branca e il cinema scolastico," in *Immagine: Note di storia del cinema*, no. 11, 2015, pp. 133-158.

[43] ASMUST, Archivio Museo, Didattica, Cinematografia, Progetto, b. 1, letter by Luigi Volpicelli to Ucelli, 21 March 1953.

[44] They were, for instance: Luce, USIS (US Information Service), Swiss Tourism Institute, CEI-INCOM, RKO, the British Council, the Navy Academy, and independent producers like Delphinus, Astra, and Libertas. See ASMUST, Archivio Museo, Didattica, Cinematografia, Progetto, b. 1, letter by Ucelli to the Milan mayor Virgilio Ferrari, 1 November 1954. See also Didattica, Cinematografia, Corrispondenza con case di produzione, b. 3, Report on cinema activities, 1 January 1955.

[45] ASMUST, Archivio Museo, Didattica, Cinematografia, Corrispondenza con case di produzione, b. 7, correspondence between Ucelli and Mary Tibaldi Chiesa; Furio Fasolo, "Il cinema ci invita alla scienza e alla tecnica," in *Cronache Economiche*, April 1955, pp. 13-17.

[46] This after receiving a press release by the Museum; in the historical archive, a copy of the document is preserved with Lanocita's business card, and a pencil note about the journalist. See ASMUST, Archivio Museo, Didattica, Cinematografia, Progetto, b. 1.

[47] Arturo Lanocita, "C'è anche un cinema per la gente che pensa," in *Corriere della Sera*, 1 May 1955.

[48] Walter Alberti, "Milano capitale del cinema scientifico," in *Corriere Lombardo*, 19 April 1955. Ucelli was in touch with Alberti and with Alberto Lattuada, occasionally borrowing films from the Cineteca and participating in their activities, as shown by the correspondence between the two institutes. However, Ucelli thought that their film collection was rather unfit for the MNST cinema project (ASMUST, Archivio Museo, Didattica, Cinematografia, Corrispondenza con case di produzione, b. 6, *Promemoria* attached to the letter by Ucelli to Gaetano Napolitano, 25 January 1956).

[49] Giorgio Buridan, "Cinemuseo: anno otto," in *Museoscienza*, September 1962, p. 15.

[50] *Idem*, p. 16.

[51] Matteo Pavesi, *Consumo ed esercizio cinematografico dal secondo dopoguerra ai giorni nostri*, cit., p. 327. Actually, Ucelli and the journalist Sam Carcano had already discussed the idea of adopting a "cinema d'essai" label for the MNST cinema project in October 1955 (ASMUST, Archivio Museo, Didattica, Cinematografia, Corrispondenza con case di produzione, b. 4, letter by Sam Carcano to Ucelli, 26 October 1955).

[52] Charles R. Acland, Haidee Wasson (eds), *Useful Cinema*, cit., p. 6.

[53] See Jesse Olszynko-Gryn, "Film Lessons: Early Cinema for Historians of Science," in *British Journal for the History of Science*, vol. 49, no. 2, 2016, pp. 279-286; Linda Bertelli, "Visual Studies of Science," *International Lexicon of Aesthetics*, Spring 2018, https://lexicon.mimesisjournals.com/international_lexicon_of_aesthetics_item_detail.php?item_id=28, last visit 16 November 2018; Oliver Gaycken, *Devices of Curiosity: Early Cinema and Popular Science*, Oxford University Press, New York 2015.

[54] The relationship between cinema and science is intrinsically multifaceted. Literature dealing with this topic belongs to different research domains such as the history of cinema, history of media, and history of science and science dissemination. See, for instance, Timothy Boon, *Films of Fact: A History of Science in Documentary Films and Television*, Wallflower Press, London 2008; Francesco Paolo De Ceglia, "From the Laboratory to the Factory, by Way of the Countryside: Fifty Years of Italian Scientific Cinema (1908-1958)," cit.; Jean-Baptiste Gouyon, "Science and Film-Making," cit.; Virgilio Tosi, *Il cinema prima del cinema*, Il Castoro, Milan 2007 (English edition: *Cinema before Cinema: The Origins of Scientific Cinematography*, British Universities Film & Video Council, London 2006); Janina Wellmann, "Science and Cinema," in *Science in Context*, vol. 24, 2011, pp. 311-328; Oliver Gaycken, *Devices of Curiosity: Early Cinema and Popular Science*, cit.; Silvio Alovisio, Simone Venturini, "Cinema

e scienze nel primo Novecento: discorsi, film, sperimentazioni," in *Immagine: Note di storia del cinema*, no. 6, 2012, pp. 6-10; Fernando Vidal, "Introduction: From 'the Popularization of Science through Film' to 'the Public Understanding of Science,'" in *Science in Context*, vol. 31, 2018, pp. 1-14. An interesting and specific case has been taken into consideration by Lorenzo Lorusso, Virgilio Tosi, Giovanni Almadori (eds.), *Osvaldo Polimanti e le origini della cinematografia scientifica*, Carocci, Rome 2011.

[55] Jean-Baptiste Gouyon, "Science and Film-Making," cit., p. 19.

[56] *Ibidem*.

[57] Augustí Nieto-Galan, *Science in the Public Sphere: A History of Lay Knowledge and Expertise*, Routledge, London 2016, p. 8.

[58] Annamaria Epiceno, Romano Paggetti, "Una pagina dimenticata dell'esplorazione scientifica: Francesco Baschieri Salvadori e i madreporari della Spedizione Subacquea Nazionale nel Mar Rosso," in *Museologia Scientifica*, vol. 8, nos. 1-2, 2014, pp. 18-22.

[59] See Mario Maffii, "Il 'sub' non sì era accorto che un pescecane lo assaliva," in *Corriere della Sera*, 18 August 1954, p. 5; Pietro Bianchi, "Avventure negli abissi marini in uno smagliante film a colori," in *Corriere d'Informazione*, 28-29 August 1954; Arturo Lanocita, "Al festival cinematografico di Venezia successo del film italiano sulla caccia subacquea in Mar Rosso," in *Corriere della Sera*, 29 August 1954.

[60] Jean-Baptiste Gouyon, "Science and Film-Making," cit., p. 17.

[61] Erica Buzzo, *La rassegna internazionale del film scientifico-didattico dell'Università di Padova (1956–1975)*, cit., p. 230.

[62] See Elena Canadelli, Simona Casonato, "1960-1962. The International Science Film Exhibition at the Museo Nazionale della Scienza e della Tecnica 'Leonardo da Vinci' in Milan: The Engineer's Solution to the Problem of Bridging Museum, Science, and Cinema," in *Public Understanding of Science*, article first published online, August 20th, 2018, http://journals.sagepub.com/doi/abs/10.1177/0963662518787564, last visit 24 September 2018.

[63] The MNST published catalogues and reports: *Mostra Internazionale del film scientifico*, Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci," Milan 1960; *II Mostra Internazionale del film scientifico*, Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci," Milan 1961; *Museoscienza – III Mostra Internazionale del film scientifico*, Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci," Milan 1962.

[64] Achille Berbenni, *Mostra Internazionale del Film Scientifico-Città di Milano. Prima, seconda e terza edizione (1960-1961-1962). Rapporto interno*, Istituto di Cinematografia Scientifica del Politecnico di Milano, Milan 1962, in Historical Archives Politecnico di Milano, b. SEG X, fasc. 100.

[65] Timothy Boon, *Films of Fact: A History of Science in Documentary Films and Television*, cit., p. 175.

[66] Erica Buzzo, *La rassegna internazionale del Film scientifico-didattico dell'Università di Padova (1956–1975)*, cit.

[67] Achille Berbenni, *Mostra Internazionale del film scientifico-Città di Milano. Prima, seconda e terza edizione (1960-1961-1962)*, cit., p. 4.

[68] Achille Berbenni, "La cinematografia specializzata," in *II Mostra Internazionale del film scientifico*, cit., pp. 7-13.

[69] Giovanni Rizzo, *Le forme del cinema per l'educazione. Il panorama italiano dagli anni '50 ad oggi*, cit., pp. 21-23.

[70] Achille Berbenni, "Fotocinematografia e cinematografia ultrarapide," in *Civiltà delle Macchine*, no. 5, 1961, pp. 66-70.

[71] To Berbenni and Ucelli, cinema's and museum's educational values, respectively, are based on observation methodology, besides specific contents: *how* we see is put above *what* we see. It is interesting that we find a similar position in the volume about scientific and educational cinematography published in 1920 in Leipzig by the Italian physiologist Osvaldo Polimanti. According to him, scientific cinema is educational, as the loyal reproduction of things taken from reality teach pupils to use their own senses and accurately describe what they see (Osvaldo Polimanti, *L'utilizzo della cinematografia nelle scienze, nella medicina e nell'insegnamento*, in Lorenzo Lorusso, Virgilio Tosi, Giovanni Almadori, *Osvaldo Polimanti e le origini della cinematografia scientifica*, cit., vol. II, p. 50).

[72] See the final statement of the ICOM Commission in ASMUST, ICOM, Congressi, b. 10.

[73] See Ucelli's talk, in ASMUST, ICOM, Congressi, b. 10.

[74] *Ibidem*.

[75] *Ibidem*.

[76] Achille Berbenni, "La cinematografia specializzata," cit., p. 8 (our emphasis).

[77] *Idem*, p. 10 (our emphasis).

[78] *Idem*, p. 4.

[79] Franco Monticelli, "Il cinema dell'indagine tecnico-scientifica," in *Pirelli: Rivista di Informazione e di Tecnica*, no. 1, 1950, p. 41.

[80] This was reviewed in an interesting article by the physician and science philosopher Felice Mondella, who saw it at the Mostra. He wrote: "The spectacle of nature will always be a good example of how watching with curious and amused eyes is compatible with a scientific look." See Felice Mondella, "Documentari scientifici," in *Civiltà delle macchine*, no. 5, 1961, pp. 9-10.

[81] See Orazio Curti, *Un museo per Milano*, cit., pp. 105-111.

[82] Giovanni Rizzo, *Le forme del cinema per l'educazione. Il panorama italiano dagli anni '50 ad oggi*, cit., p. 123.

[83] Luigi Volpicelli, *Prefazione* a Evelina Tarroni, Sandro Paderni, *Cinema e gioventù: studio degli aspetti sociali e dei motivi d'interesse*, cit., pp. 26-33; Giovanni Rizzo, *Le forme del cinema per l'educazione. Il panorama italiano dagli anni '50 ad oggi*, cit., pp. 122-123. Volpicelli was one of the first scholars in Italy to teach cinema pedagogy. He participated in the cinema courses at the University of Rome in those years. Lessons were promoted by the Public Education Ministry Film Archive, with the participation of Remo Branca as well. See Giovanni Grasso, *Filmologia e disciplinarizzazione: il corso dell'Università di Roma (1949-1959)*, in David Bruni, Antioco Floris, Massimo Locatelli, Simone Venturini (eds.), *Dallo schermo alla cattedra: La nascita dell'insegnamento universitario del cinema e dell'audiovisivo in Italia*, cit., p. 109.

[84] Francesco Mauro, *Il cinema nella scuola*, offprint of *Cineradio. Rivista Tecnica*, Stab. C. Perego, Milan 1961.

[85] They were a Cinemeccanica Victoria IV E projector (35mm), and a Microtecnica Micron XVII Arco Alfa projector (16mm). The information about the hall projectors was retrieved from the Museum archives thanks to Isabella Otto, an intern from the Università degli Studi di Milano. Both projectors are now preserved in the Museum collections.

[86] Remo Branca, *Il problema dei grandi schermi in relazione alla cultura cinematografica e alle attrezzature tecniche nel settore degli istituti scolastici e scientifici* (*The Problem of Large Screens in Relation to Cinematographic Culture and the Technical Equipment of Scientific and Scholastic Institutes*, English abstract), in *Atti del IX Congresso internazionale della tecnica cinematografica*, Torino, 29 September – 1 October 1957, pp. 81-82. Branca discouraged educators from projecting their films in regular theatres, especially if their screen did not have a 4:3 ratio. In his opinion, wider formats distracted the audience. In general, he recommended that educators avoid any analogy with entertainment cinema. Considering Branca's institutional role, his opinion was rather influential (see Giovanni Grasso, "Il ventennio del cinedidatta. Remo Branca e il cinema scolastico," cit.). The MNST theatre thus seems a good compromise. Nevertheless, various hints suggest that Ucelli did not share Branca's ideas: in August 1955 he was thinking of installing a Cinemascope system (see ASMUST, Archivio Museo, Didattica, Cinematografia, Progetto, b. 1, letter by Ucelli to Mary Tibaldi Chiesa, 31 August 1955). The context in which Branca considered this is interesting. The Museum's library preserves all the proceedings of the International Conference of Cinematography Techniques, dating from 1956 to 1962. The participants' list includes the names of many figures involved in the cinema project. Monticelli and Berbenni, for instance, were diligent participants.

[87] See Alison Griffiths, *Shivers Down Your Spine: Cinema, Museums, and the Immersive View*, cit.; Haidee Wasson, *Big, Fast Museums/Small, Slow Movies: Film, Scale, and the Art Museum*, cit.; Haidee Wasson, *The Elastic Museum: Cinema Within and Beyond*, cit.

[88] Alison Griffiths, *Shivers Down Your Spine: Cinema, Museums and the Immersive View*, cit., p. 164.

[89] ASMUST, Archivio Museo, Allestimento Sezioni Museali, Materiali Preparatori [1940]-1955, b. 1, Incarto S – Tecnica dello spettacolo [by Guido Ucelli].

[90] Haidee Wasson, *Moving Images: Portable Histories of Film Exhibition*, in John Nerone (ed.), *The International Encyclopedia of Media Studies: Media History and the Foundations of Media Studies*, Wiley-Blackwell, Oxford 2013, p. 369.

[91] See Giorgio Buridan, "Cinemuseo: anno otto," cit.

[92] Diego Cavallotti, Simone Dotto, *Notizie dagli scavi: altre prospettive per l'archeologia dei media*, cit., p. 36.

[93] Paolo Magaudda, Gabriele Balbi (eds.), *Fallimenti digitali. Per un'archeologia dei nuovi media*, Unicopli, Milan 2018, pp. 9-13.

[94] Silvio Alovisio, Paolo Bianchini, "Sul cinema educativo in Italia: teorie, istituzioni e personalità dalle origini agli anni Cinquanta," cit., pp. 11-12. The authors underline the lack of research about the topic.

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Abstract Moving Images and Expanded Architectures. The 1958 World's Fair in Brussels and the Philips Pavilion

This paper is based on research into the history and theory of abstract and synesthetic audiovisual works, its environmental dimension and the alternative projection conditions it often required. I aim to show the case in which our theorization of the moving abstract images ends up being redefined within frameworks that include projection environments such as architectural pavilions. I approach projection environments as a connected space "in-between," that is, between subject and object, a *milieu* redefined by technology. I seek to show how the experience of *milieu* becomes a *medium*, an intermediate field of sight and sensation that is constantly reconfigured by technical devices.

Abstract moving images, and abstract cinema, especially as exemplified by their early developments in the 1920s, offer a privileged point of observation for developing a new, deeper understanding of the various ways the technical potential of the cinematic medium enabled forms of experimentation in synesthetic abstract art. Abstract films blended painting, music, movement, images, sounds, forms, and colours to create unique audiovisual works of art, works that no longer addressed a single perceptual level (vision), but rather sought to achieve a fusion of vision and hearing. In this sense, we can shed light on abstract film's experimentally and technologically innovative role by comparing it with cinema's original properties and the new synaesthetic works of art.

The experimental and technologically innovative role of abstract film can be revealed most clearly by comparing it with the intrinsic characteristics of cinema (projection, light, movement) and the concepts of production and reproduction, concepts which were widely debated in 1920s theories of cinema.[1] In relation to this issue, Hans Richter declared that

> *by a strange paradox, the principal aesthetic problem of cinema, which was invented for reproduction (of movement), is precisely that of "going beyond" reproduction. In other words the question is this: to what point should the movie camera (film, colour, sound, etc.) be perfected and used to "reproduce" (any object that appears in front of the lens) or to "produce" (sensations that cannot be aroused with any other artistic medium)?*[2]

In a 1922 text entitled *Produktion–Reproduktion* ("Production–Reproduction"),[3] László Moholy-Nagy addressed the problem of the normative distinction between production and reproduction in both acoustic and optical-kinetic (photography and film) phenomena and proffered an effective response to this question. While in the majority of cases *reproduction*, by proposing connections that already exist, should be regarded as a mere act of virtuosity aimed at reiterating already-established relations, *production*, instead falls within the sphere of the relationships that have to do with improving and developing human creative processes:

> *reproduction (repetition of existing relationships) without enriching points of view must from the special point of view of creative art be considered at best only a matter of virtuosity. Since production (productive creativity) is primarily of*

> *service to human development, we must endeavour to expand the apparatus (means) which has so far been used solely for purposes of reproduction for productive purposes.*[4]

The idea of productivity expressed in Moholy-Nagy's comments is not exclusively to meet the demands and requirements of artists associated with the avant-garde movements; instead, it should be seen as a general condition of humanity: seizing on the new techniques for improving the faculties of the senses, modern man inevitably sets out to complete and perfect human sensory organs, even the most complex, and to establish new and more extensive relationships between various optical phenomena (fig. 20).

Throughout its history, the projection of abstract images and coloured light has produced environments that share many characteristics with mid-place or *mi-lieu* (lack of clear coordinates, un-centeredness). Proponents of abstract cinema have seen its "universal language" – as it was ambitiously defined by Hans Richter and Viking Eggeling in a 1920 text that has since been lost[5] – as having the potential to give rise to a new humanity (a utopian hope that represents a common feature of Modernism), and, in turn, stimulate a series of multisensory, immersive, synesthetic, and virtual new possibilities for projecting images. Abstract cinema can thus be better understood by rethinking the *medium* through which it is made visible. Two of its possibilities were to achieve a condition at once aesthetic and political: on one hand, a exert better control over the viewer's feelings and reactions, made possible through a different conception of the screen; on the other hand, to ensure collective participation in the same environment, potentially open and interactive; spectators could move within and interact with its architecture, sounds and moving images. This participative experience of a common space – a public, free, interactive architecture – calls into question the traditional conditions of image projections: if the essence of synesthetic audiovisual works lies in an alternative language consisting of moving abstract forms, sounds, music, psychedelic lights and colors, then it is necessary to reconsider the "environmental" device that enables films to be reproduced. This would require a different shape, something other than the traditional silver screen,[6] and a different posture for the spectator to replace straight bi-dimensional film projection.

Examples of "alternative screens" of this kind are the "Poly-Kino" imagined by Lázló Moholy-Nagy[7] in the 1920s and the "Dynamic Square"[8] suggested by Sergei Eisenstein; in terms of alternative and immersive projection environments, some cases worth citing are the Movie-Drome theater designed by Stan Vanderbeek in the 1960s,[9] and the "Expanded Cinema" proposed by Gene Youngblood in the 1970s (Multiple-Projection Environments in particular).

In this paper I will focus on one of the most significant examples of a project that expanded the conditions of projection in a multimedia architectural environment: the Philips Pavilion at the 1958 World's Fair in Brussels. Le Corbusier and his assistant and composer Iannis Xenakis conceived the Pavilion as an electronic-spatial environment capable of combining architecture, vocal and concrete music, sounds, colored light, abstract images and film in a virtual experience of an astonishing synesthetic audiovisual work.

Although Le Corbusier agreed to the commission (the idea for the Pavilion came from Louis Kalff, Artistic Director of the Philips corporation), he refused the Philips Corporation's proposals of individuals to collaborate with him in this production; the architect was resolute about his personal choice of Edgard Varèse as composer and equally determined to supervise the entire visual spectacle of the *Poème électronique* himself. It is important to recall that, at that time, Le Corbusier was working on one of his most significant projects: the Complex of the City Hall in Chandigarh, India. The concept for the Philips Pavilion unquestionably stemmed from Le Corbusier's creativity, but the actual implementation and design of the exterior was left to Xenakis, Philips technicians and Strabed company engineers (H. C. Duyster).[10] The Philips Pavilion building was finally a tool for staging Le Corbusier's main project: the synaesthetic audiovisual work the *Poème électronique* (fig. 21).

Poème électronique was the first electronic-spatial environment combining architecture, film, light and music in a total experience that unfolds in time and space.

This *Electronic Poem* – an 8-minutes electronic piece written and composed by Edgard Varèse in Eindhoven at the Philips laboratories, as a part of the multimedia presentation for the Philips Pavilion – was projected thanks to a very complicated spatialization scheme involving 400 loudspeakers scattered throughout the Pavilion and synchronized with the projection of slides selected by Le Corbusier, featuring images related to the history of human civilization, abstract images and monochromes. In relation to this aspect, Le Corbusier states: "I will not make a façade for Philips, but an electronic poem. Everything will happen inside: sound, light, colour, rhythm. Perhaps a scaffolding will be the pavilion's only exterior aspect."

Some important documents contained in the Iannis Xenakis Archives provide a detailed presentation of the Philip Pavilion and *Poème électronique*: "The theme of this new sound and light show had to do with the humankind's evolution from the beginnings of the species. This sound composition was electronically devised to create stereophonic affects, projections of images and plays of light and colour, with all the elements coming together to make up Le Corbusier's architectural and audiovisual piece."[11]

The *Electronic Poem* would never have been possible without advances in the sciences of applied electronics. Indeed, electro-acoustics, lighting and electronic control technology – a field that owed many of its developments to the disinterested, applied research work carried out by Philips Laboratories – represented essential components of the piece (fig. 22).

Poème électronique is a complex, 480-second-long sonic composition generated by magnetic strips and electronic sound that could be staged without a real score. Instead, the variations in colour and musical intensity were indicated on spectrometric cards. There was no pre-established synchronization or correspondence with the visual material selected by Le Corbusier, organized by Jean Petit and edited by Philippe Agostini; it was wholly random except for a specified period of six minutes of silence occurring during the piece.

Among other elements, Le Corbusier used machine noises, transported piano chords, filtered choir and solo voices, and synthetic tone colourings[12] for *Poème électronique*. With the help of the advanced technical means made available through the Philips Pavilion, the sounds of this composition for tape recorder were able to "wander" through the space along highly complex routes. Varèse's work had always pursued the abstract and, in part, visually inspired concepts of form and spatial movement.

In his fundamental book *Space Calculated in Second*, Marc Treib stresses that visual elements and sound created a strange form of "accidental" synaesthetic system (fig. 23):

> *The work intended to be a new genre, would utilize, publicize – and stimulate – the technical potential of the Philips corporation, and would synthesize light, color, sound, and rhythm. Sound, for the most part, was left entirely to Le Corbusier's collaborators Edgard Varèse and Iannis Xenakis, who would compose the primary eight-minute score and the two-minute interlude, respectively. The link between the visual and aural senses would be fortuitously accidental […]. For the most part, the musical score was conceived and produced completely independently of the visual work. Their points of congruence, or at least intersection, would be determined solely by chance.*[13]

Creating *Poème électronique* required elaborate lighting and electro-acoustical equipment; as Louis Kalff and the technical specialists working for Philips state in the *Philips Technical Review*, a complex electronic control system was needed to create the lighting effects:

1. "Ambiances," which are illuminated surfaces intended to conjure up a particular atmosphere. They are produced by projecting coloured light onto the pavilion walls; long bands of colour accentuate the peculiar shape of the building. 2. "Volumes," i.e. two figures suspended in space, one female and the other a space structure of metal tubes, both treated with fluorescent paint. When flooded with ultraviolet, the one "volume" glows red, the other greenish blue. 3. "Ecrans," these are large areas of the wall onto which black-and-white pictures of human beings, animals and all kinds of objects are projected. The fact that "ambiances" are also present at the same time makes the black of the projections appear to be coloured. 4. "Tritrous," at certain points along the wall around the "écrans," brilliantly coloured beams of light or figures in black and white are occasionally projected. This is carried out by means of a film strip, each frame of which is entirely opaque except for three holes ("trois trous") into which the colours or figures are introduced.[14]

Figure 24 et seq., held by the Le Corbusier Foundation, illustrate the scenario for these different light effects, image projections, and sound-space arrangements in the different ambiances of the Pavillion.

As Kate Mondloch suggests in her essay on the Philips Pavilion, "Le Corbusier conceived of the *Poème* *électronique* as an entirely new kind of spectacle and intended for the building to be reminiscent of the human stomach, a combination of the organic and the geometric." Le Corbusier indeed described the Philips Pavilion as "a stomach assimilating 500 listener-spectators, and evacuating them automatically at the end of the performance."[15] Ever since initially conceiving of the project's, he had planned for each round of approximately 500 visitors to stand for 8 minutes in order to experience the presumably multidirectional presentation from all points.

These environmental and synesthetic conditions of projection, conditions which are at the foundations of experimental and abstract film from its origins in the 1920s, set in motion the significant process of "aesthetic upgrading" I mentioned earlier produced by moving images, sounds and architectural space. The atmospheric density produced by the complex stratification of atmospheric elements in this piece was reminiscent of the Chapelle de Notre-Dame-du Haut à Ronchamp *ambiance* Le Corbusier created in 1955, shortly before the Philips Pavilion (fig. 25). This density contributed to granting *Poème électronique*, and indeed the entire Pavilion, the character of a "total environment,"[16] a synthesis of the greatest artistic achievements of mankind: architecture, music, visual arts. In other words, a true *Gesamtkunstwerk* for that period, the Philips technology of the 1950s.

Le Corbusier had carefully selected a series of images and documents from a wide array of fields (some surprising images were chosen from the Palais de la Decouverte catalogue) and entrusted them to his collaborators Jean Petit and Philippe Agostini to be translated into a film montage.[17] The Philips Pavilion presented a kind of virtual collage for 20th century humankind. The visual presentation consisted of seven sections: *Genesis*; *Matter and Spirit*; *From Darkness to Dawn*; *Manmade Gods*; *How Time Molds Civilization*; *Harmony*; *To All Mankind*. In sequence, we can see a montage of elements from heterogeneous contexts: coloured lights, a bull, the head of a Greek statue, a skull, a projections of sea shells, scientists, an African woman, a dinosaur skeleton, coloured lights, geometric figures, the Sphinx, a telescope operator, a surgeon, a miner, a farm horse, Charlie Chaplin, a bomber plane, a radar, clouds, children staring at the camera, the Eiffel Tower, animals, Stan Laurel and Oliver Hardy, abstract images and astronomical images, babies, skyscrapers, the Modulor, a baby's hand, children (fig. 26).

In conclusion, I would like to emphasize two points: The "Total Electronic Gesture,"[18] as Iannis Xenakis described it, on one hand, and the multisensory, immersive and synesthetic new possibilities for projecting images and lights and *spatializing* sounds staged by *Poème électronique*, on the other hand, produce two effects and two direct consequences: they virtualize experience and create an "Abstract Realm."

Concerning the first effect, the virtualization of experience, in relation to this point I share the position Kate Mondloch presents in *Le Corbusier's Poème électronique and the Historicization of New Media Arts*, in which she suggests that *Poème électronique* is an "8-minute experience of virtuality." Her essay seeks to historicize the technological production of artistic virtual space by investigating the *Poème électronique* as a paradigmatic example of much earlier attempts to create spatialized, virtual experiences in spectators. She argues that there are many significant parallels between the highly disciplined spectatorship conditions of *Poème électronique* and those of contemporary artistic production in new media, thus offering a theoretical and historical foundation for art-historical discourse on the proliferation of immersive multimedia artworks:

> *Le Corbusier's 1958 automated multimedia performance event commissioned by the Philips Corporation for its pavilion at the World's Fair in Belgium, the Poème électronique, prefigured the "virtuality" of certain computer-reliant works made with new media. The Poème électronique's immersive environment strove to create a sense-overloaded observer who would experience a spatialized virtual event.*[19]

As for the second consequence, the one deriving from the synaesthetic specificities of *Poème électonique* and the Philips Pavilion, as Iannis Xenakis claims in *Notes Towards an "Electronic Gesture"* (1958), the Philips Pavilion at the Brussels World's Fair represents an early attempt to achieve this artistic synthesis of sound, light, and architecture, an initial step towards an "Electronic Gesture." In his Notes, Iannis Xenakis argues that electro-acoustic techniques made it possible to conquer geometric space, mathematical thought and the realm of Abstraction:

> *They enable a vast audiovisual synthesis in a "Total Electronic Gesture" previously unattainable and above all, one which is placed in the realm of Abstraction, which is the natural and indispensable environment to its existence. In this respect, the Philips Pavilion at the Brussels World's Fair represents a first experiment in this artistic synthesis of sound, light, and architecture, an initial step towards an "Electronic Gesture." I would like to conclude by noting that a new conceptual consciousness, abstraction, and a new technical infrastructure, electronics, are currently stirring human civilization even as we speak.*[20]

Illustrations

20. László Moholy-Nagy, *Ein Lichtspiel: schwarz weiss grau*, 1930.
21. Philips Pavilion, Brussels 1958 (*Revue Philips*, no. 26, 1958), Fondation Le Corbusier.
22. Iannis Xenakis, *Poème électronique*, 1958, Xenakis Archives (BnF – MUS).
23. *Poème électronique*, proposal for the *minutage* (Sequence IV), Fondation Le Corbusier.
24. Scenario were hand coloured in gouache illustrating the effect of ambiances (Sequence I), Fondation Le Corbusier.
25. Le Corbusier, Chapelle de Notre-Dame-du Haut, Ronchamp, 1955.
26. Le Corbusier, Xenakis, Varèse, *Poème électronique*, 1958.

Notes

[1] On the issue of the epistemological, productive and innovative power of the cinematic medium in 1920s theories on cinema, see Francesco Casetti, "Lo sguardo di un'epoca," in *L'occhio del Novecento. Cinema, esperienza, modernità*, Bompiani, Milan 2005, pp. 21-54.

[2] Hans Richter, "Dalla pittura moderna al cinema moderno," in *Il cinema astratto*, in *La Biennale di Venezia*, no. 54, 1964, p. 3; republished in Gianni Rondolino, *Il cinema astratto. Testi e documenti*, Editrice Tirrenia Stampatori, Turin 1977, pp. 219-20.

[3] See László Moholy-Nagy, "Produktion-Reproduktion," in *De Stijl*, vol. 5, no. 7, 1922, pp. 97-101; also the article with the same title published by Moholy-Nagy in *Malerei Fotografie Film* (first ed. 1925, expanded in 1927), Gebr. Mann Verlag, Berlin 1986 (English ed.: "Production Reproduction," in *Painting Photography Film*, trans. by J. Seligman, MIT Press, Cambridge [MA] 1973, pp. 30-1).

[4] *Idem*, p. 30.

[5] Hans Richter and Viking Eggeling, *Universelle Sprache* (1920). The original text has not survived; all that remains is a draft republished in English under the title *Demonstration of the "Universal Language."* See Stephen C. Foster (ed.), *Hans Richter, Activism, Modernism, and the Avant-Garde*, MIT Press, Cambridge (MA) 1998, pp. 185-239. Umberto Eco, *Search for the Perfect Language*, Wiley-Blackwell, Hoboken 1997.

[6] On the recent debate regarding the specificity of the cinematic device, see Raymond Bellour, *La Querelle des dispositifs. Cinéma – installations, expositions*, Trafic, Paris 2012; Francesco Casetti, *The Lumière Galaxy: Seven Key Words for the Cinema to Come*, Columbia University Press, New York 2015.

[7] Lázló Moholy-Nagy, *Painting, Photography, Film*, 1925-27, trans. by J. Seligma, MIT Press, Cambridge (MA) 1969.

[8] Sergei Eisenstein, "The Dynamic Square," *Film Essays and a Lecture*, 1930, Princeton University Press, Princeton 1982, pp. 48-65. See Antonio Somaini, *Ejzenštejn. Il cinema, le arti, il montaggio*, Einaudi, Torino 2011, pp. 411-22.

[9] Gloria Sutton, *The Experience Machine. Stan VanDerBeek's Movie-Drome and Expanded Cinema*, MIT Press, Cambridge (MA) 2015.

[10] Carlotta Darò, *Les Murs du son, le Poème électronique au Pavillon Philips*, Editions B2, Paris 2015, p. 6.

[11] The original document is in French: “Le thème de ce spectacle inédit de son et lumière traite de l’évolution de l’humanité depuis ses commencements. Une composition sonore électroniquement ‘ajustée’ è des effets stéréophoniques, des projections d’images, des jeux de lumière et de couleur, sont les éléments dont se compose la création architectonique et audio-visuelle de Le Corbusier.” (Iannis Xenakis Archives, BnF – MUS).

[12] See Golo Föllmer, “Le Corbusier; Iannis Xenakis; Edgard Varèse ‘Poème électronique: Philips Pavilion,’” *Media Art Net*, http://www.medienkunstnetz.de/works/poeme-electronique/, last visit 31 December 2018.

[13] Marc Treib, *Time Calculated in Seconds: The Philips Pavilion, Le Corbusier, Edgard Varèse*, Princeton University, Princeton 1996, p. 98.

[14] Louis Kalff, “The Electronic Poem Performed in the Philips Pavillon at the 1958 Brussels World Fair,” in *Philips Technical Review*, vol. 20, n. 2-3, 1958/1959, p. 38.

[15] Kate Mondloch, *A Symphony of Sensations in the Spectator: Le Corbusier’s “Poème électronique” and the Historicization of New Media Arts*, in *Leonardo*, The MIT Press, vol. 37, no. 1, 2004, p. 59.

[16] Carlotta Darò, *Les Murs du son, le Poème électronique au Pavillon Philips*, cit., p. 11.

[17] See Kate Mondloch, *A Symphony of Sensations in the Spectator: Le Corbusier’s “Poème électronique” and the Historicization of New Media Arts*, cit., p. 59.

[18] Iannis Xenakis, “Notes Towards an ‘Electronic Gesture,’” (1958), in *Music and Architecture by Iannis Xenakis*, trans. Sharon Kanach, Pendragon, New York 2008.

[19] Kate Mondloch, in her essays on *Le Corbusier’s “Poème électronique” and the Historicization of New Media Arts*, cit., p. 57.

[20] Iannis Xenakis, “Notes Towards an ‘Electronic Gesture,’” (1958), in *Music and Architecture by Iannis Xenakis*, cit.

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Montréal's Expo 67 Within an Expanding Cinema History

The 1967 world exposition in Québec's largest city Montréal (known for short as "Expo 67") was a cinematographic event *par excellence*. Many of the central pavilions featured extravagant projection experiments,[1] others merely screened small-gauge films not specifically produced for the occasion. From short documentaries on local traditions shown in a dark corner all the way to intricately designed buildings with specifically developed projection systems such as *In the Labyrinth*, based on ideas from Northrop Frye and Marshall McLuhan, Expo 67 offered a kaleidoscopic array of different uses and applications of film. Nevertheless, only recently have such events begun to be researched within media history. I believe that taking world expositions and other large thematic events seriously and thinking about them within the framework of film and cinema history does ultimately transform our understanding of what film is and how we can and should research it within a wider media environment. Taking this into account, this contribution is meant less to add one or two filmic installations to our canon of memorable works, but rather to propose a different framework in order to alter our understanding of what ultimately the subject of our discipline is. In this sense, I propose the term "expanding" to evoke the enlarged field that we should be working on, but also the different kinds of understanding what a medium is or could be. Historically, the term obviously references Gene Youngblood's infamous *Expanded Cinema*, published in 1970, one of the great unread classics of our discipline.[2] Even though Youngblood's work does not help us to systematise and better understand the diversity and variability of media in our present age directly, it is a treasure trove of interesting material that surfaced in the late 1960s and that it be made relevant to our present media situation.

Expo 67 is a key event and an exemplary case study which is important for at least two reasons. Historically, the late 1960s marked a moment when a shift from stable media organisations functioning like a factory or an assembly line gave way to more dynamic and flexible configurations. The year 1967,[3] located half-way between the end of World War II and the break-up of the Eastern bloc, could be seen as a water-shed year in which satellite transmission of TV shows[4] and the usage of computers in entertainment became visible markers of change for a larger public. In this sense, Expo 67 can be seen as a symptom of larger tectonic shifts happening in the second half of the 1960s. Systematically, the exhibition demonstrates how the nation state, big corporate capitalism and the entertainment industry are transformative powers that are capable of adapting to different contexts. Canada, a multi-lingual and multi-cultural nation whose own integrity and unity has always been under pressure, might be prototypical in this respect. Expo 67, then, can be understood as a glimpse into the complexities of today's intricate media configurations, all the way from utopian promises to dystopian fears. If examined with the privilege of hindsight, it allows us to excavate the footprint of the control society, as we go about writing a media archaeology of our networked present. Yet, in order to do this, we need to adapt our methods and critically examine the traditional concepts and methods of media history. Therefore, the first part of this contribution will address some methodological considerations, while a second (and longer) part will put these ideas into practice and discuss the specificities of Expo 67.

Expanding cinema towards an entangled, transnational and ecological method

As it is impossible for this contribution to outline the projection experiments at Expo 67 in detail which was a cinematographic event *par excellence*, I want to start by delineating how we might be able to study such events and phenomena. When I propose to see the event as an archaeology of the network society, it does not mean to reduce these examples to a unilinear "expanded cinema" – trajectory which might lead from the avant-garde to the documentary and IMAX or from Montréal's experiments to Hollywood's mainstream. I rather propose to understand these developments as symptoms in a larger cultural shift which Deleuze has conceptualized as the transition from the disciplinary to the control society.[5] This is one reason for using the term "expanding" – to highlight the fluid and dynamic nature of the cinema as a medium which encompasses many fields.[6] In tracing the genealogies of the complex projection experiments at Expo 67, one can highlight how many different fields were involved – expanding cinema taps into the modularity of modern architecture as well as into military research, it partakes in esoteric thoughts of cosmic harmony as much as in business ventures. Of course, more detailed analyses are needed because forces always interact in different ways, giving rise to affirmative or critical configurations, producing contradictions and tensions, as well as productive relations – and in a historical perspectives there are different manners of relating this past to our current state of networked media.

From these wide contextual questions, let me zoom in on the methods and tools at hand. I want to propose three central aspects which we should be paying attention to when looking at moving images and exhibitions. The three concepts can be summed up as "ETE," based on the first letters of the terms. First of all, to understand the logics and dynamics of exhibitions in their complex nature, it is necessary to see them as *entangled*. Entanglement implies that events and actions are not in – and of itself – limited to specific spheres or pre-established (social) subsystems. They have to be understood as complex and dynamic systems of relations that never acquire any final equilibrium. These events remain always in flux and open to change. One concrete example from the material provided by Expo 67 would be how government agencies, film production companies, individuals and material objects interact and form complex webs and networks that cannot be understood simply by looking at the exhibition itself or by just concentrating on the film industry. Entanglement hints at the basically interminable and radically open nature of events, also at the asymmetries and dynamic differences between contrasting situations.

In the past fifteen years, the term entanglement has been developed as a concept in historical studies where "entangled history" has gained traction as a turn away from national and comparative approaches, a fact highlighted in the French original "histoire croisée."[7] Entanglement thus implies a *transnational* approach in which we have to leave the methodological nationalism behind and abandon the nation state as the central category for our research. Even comparative approaches still cling to the nation as the most important level at which actions take place when we, for example, compare the French and the German film funding systems or censorship in Hong Kong and Chinese media of the 1990s. I would argue that action, meaning, and aesthetics rather emerge from phenomena that do not so much concern themselves with national borders, but that happen across them or do disregard them completely. Of course, the national does still retain its importance in terms of legal and political frameworks, in terms of the self-understanding of institutions, but it should not be the default value for studying such events. More importantly, our thinking should not stop at national borders and rather follow the intricate pathways of ideas, audiovisual material and financial structures.

My third and final term is also already implicit in what I have been saying because I am proposing an *ecological* model that is not interested in establishing clear-cut boundaries, but rather in networks and relations, in systemic gains and collateral damages. We should follow actors, objects and discourses across different systems and relations, try to understand where do come from, how they interact, and where they end up. But apart from this systemic approach there is another sense in which I believe we should be aware of ecological thinking. Many of the complex projection experiments highlighted the question of perception and environment that is central to theories of ecology. How do entities orient themselves, survive and thrive, reproduce and produce in different environments – these questions from ecology are crucial for understanding many of the examples that come up when we talk about exhibitions and moving images.[8] In fact, it is only a short way from here to cybernetic ideas of control and regulation which found a fertile ground in the experiments at many of the large-scale exhibitions from the 19th to the 21st century.

Montréal – expanded cinema

The World Exposition 1967 in Montréal coincided with the centenary of Canada and borrowed its motto "Terre des hommes / Man and his World" from Antoine de Saint-Exupéry.[9] Expo 67, as it was popularly called, opened on April 28th and closed on October 27th, 1967, attracting roughly 54 million visitors over the span of six months. The event took place on two artificially constructed islands in the St. Lawrence-River and promised a utopian extraterritoriality, as can be seen in the season tickets which took the form of passports to an imaginary country, utilizable to collect stamps from the different national pavilions. A large number of venues presented complex multi-screen experiments, so that Montréal 1967 can be understood as a key moment in the development of "expanded cinema."[10] Some commentators speak of 3,000 films which were produced for the exposition.[11] Most critics exhibit a sense of astonishment at the multitude of diverse projection experiments. *Film Quarterly* states:

> *Going to Expo '67 to see film was like going on a binge, for film was everywhere, unreeling at a furious rate. Expo was a fair of film. […] multiple-dimension films, multi-screen, multi-image, multi-media light and sound experiences culminating in the most ambitious architectural-film relationship [...] Film came on two screens, on three, five, six, nine in a circle, 112 moving screen cubes, a 70mm frame broken into innumerable screen shapes, screens mirrored to infinity, a water screen, a dome screen [...]. In some pavilions show titles reflected the struggle to identify these forms: Circle-Vision, Polyvision, Kinoautomat, Diapolyecran, Kaleidoscope.*[12]

A popular magazine such as *Newsweek* even declared the traditional cinema to be the symptom of a dying art form, a sentiment well-known from today's digital age,[13] but not really expected when examining sources from the 1960s:

> *Instead of telling tedious tales with a single picture on a single screen while the audience sits numbly still, they tell feelings and moods by hurling whole splattersful of pictures on floors, ceilings, whirling globes, plastic cubes and multiple screens in multiple shapes and sizes while the audience moves through mysterious magic chambers. After this, your friendly neighborhood theatre is a dinky mausoleum for the pointless preservation of decaying movie relics.*[14]

One of the central attractions of Expo 67 was *Labyrinthe* which was produced by the National Film Board of Canada on a budget of $ 4.5 million. The building was inspired by the Cretan labyrinth of the minotaur, as well as by Marshall McLuhan's ideas and it was realized in close cooperation with the literary scholar and mythologist Northrop Frye. It was one of the central presentations of Canada as the host nation, coordinated by a government agency and symbolically endorsed by two leading Canadian intellectuals (even though their role and engagement was quite different).[15] Arguably, as a young nation (it was the country's centenary), Canada wanted to project a self-image that connected ancient mythology with the newest technology and the latest theoretical developments.

The audience was admitted in groups to pass through a series of two projection rooms and a maze within approximately 45 minutes.[16] At the first stage, spectators found themselves standing on one of eight galleries (four on each side of the room) of an oval room with two screens, one of which was vertically situated on the front wall, the other was horizontally placed on the floor. The simultaneously visible images on the two screens formed complex relations: a father looking lovingly at a baby in a crib, a child feeding fish swimming below or a boxer triumphing over an opponent he has knocked out. The projection in this first hall consisted of three parts, *Arrival*, *Childhood* and *Confident Youth* that dealt with the birth and young age of the human being, yet not focused on a single protagonist or a one-dimensional story-line. Five sound systems and 288 speakers heightened the spectacular spatial experience that made experts anxious if people might faint or jump from the galleries through sheer over-stimulation. The mid-part of the parkour was a mirror maze of seemingly infinite expansion, yet also extreme limitations, a "software space" as one critic called it. The third part consisted of a conventional cinema theatre with five screens in the shape of a cross which could either give a compound image across the different screens or work with relations of contrast and correspondence between the different images.

Labyrinthe is one of the best known projection experiments at Expo 67 and it will serve here as a test case for the methodology proposed above. In the following, I want to trace some of the transnational and entangled ramifications of this specific work. *Labyrinthe* was created by Roman Kroitor, Colin Low and Hugh O'Connor and produced by the National Film Board of Canada. Kroitor, Low, and O'Connor shared a background in documentary filmmaking, not surprising for filmmakers affiliated with an institution founded and shaped by John Grierson in the 1940s and often credited in film histories as the birthplace of *cinéma vérité* and direct cinema. Even though the spectacular multi-screen experiments of the 1960s might appear to be a far cry from the sober Griersonian documentaries, they share some underlying ideas such as understanding film not primarily as a means of entertainment, but as a medium to generate and disseminate knowledge about the world. In this sense, Grierson, who famously defined the documentary as the "creative treatment of actuality," always understood the medium as a contribution to managing and controlling the population of a nation state, as a form of "governmentality" as Foucault has famously called it. In the service of a reformist government which aimed at managing the affairs of public life rationally and efficiently, Grierson conceptualized the documentary as a means of informing the subjects of a media democracy about the efforts and achievements of public governance.[17]

Contrary to the avant-garde – Grierson himself had been active in the London Film Society where his film *Drifters* (1929) premiered in 1930 in the same program as Sergei Eisenstein's revolutionary epic *Battleship Potemkin* (1925) – the Scotsman saw the task of film not in the revolutionary destruction of the existing order or in the agitation of the masses, but in the dissemination of information and management of the population by giving them a positive attitude towards the challenges of modernity. While the 1920s and 1930s saw efficiency, rationality and discipline as central ideas for the institutional (self-)organization of society, the 1960s, under the impression of the counter culture and the influx of ideas such as cybernetics, witnessed a shift to underlying concepts such as flexibility, creativity, feedback and self-management.[18] In this sense, the large thematic expositions of the 1960s can be read as symptomatic case studies and trial runs for how the media functioned in new social networks for the management of the public sphere through positive incentives rather than through discipline and direct control. While Canada as a nation state was responsible for *Labyrinthe*, the specific aesthetic and political ramification of the set-up reach far beyond the nation state. Indeed, while Grierson's work in Britain for the General Post Office and the Empire Marketing Board could still be subsumed within the confines of the (colonial) nation, his postwar work made him a transnational agent in the true sense of the word.

Let us return to those filmmakers behind *Labyrinthe* to further unravel the entangled interdependencies and ramifications: Kroitor had made the influential Paul Anka-portrait *Lonely Boy* (1962), and he had collaborated with Low on the documentary *Universe* (1960), which had impressed Stanley Kubrick so deeply in the early stages of preparing *2001: A Space Odyssey* (1968) that he collaborated with both of them for a while. Both Kubrick's film and the multi-screen installations at Expo 67 partake in a specific sentiment particular to the late 1960s oscillating between technological euphoria, a hippiesque striving for a cosmic consciousness with hints of a dystopian attitude. They also shared the belief that film, ontologically speaking, was not a narrative medium characterized by recognizable protagonists with clear-cut goals and ruled by spatiotemporal coherence (as in classical cinema), but that the variability and flexibility of audiovisuality allows for forms of experience no longer geared towards psychological empathy or identification, but giving the individual more leeway in appropriating and processing audiovisual material. Here, the auditorium is seen less as a space for entertainment, narrative and conventional forms of representation and rather as a place for education and vocational training, for artistic expression and individual experience, a space of scientific and social discourses in which a foundation for a different conception of the world could be developed and tried out. This ecological understanding of media as shaping environments and allowing for different kinds of experiences is a common denominator from McLuhan to cybernetics and early computer culture.

The outlines of these tectonic shifts become even clearer when we follow the developments into the years after Expo 67. It was Kroitor who, together with Greame Ferguson and Robert Kerr (both were also active with multi-screen projections at Expo 67) and still in 1967, founded the Multi-Screen Corporation, which soon became the IMAX Corporation. Not coincidentally Montréal 1967 is often seen as the origin of IMAX with the World Exposition 1970 at Osaka as the projection system's first public outing when *Tiger Child* (Donald Brittain, 1970) had its premiere.[19] IMAX could be seen as following a different logic in which the storyline recedes and other aspects of the audiovisual experience gain higher traction: sensing environments, gaining knowledge about the world through audiovisual stimulation. As Charles Acland has argued, IMAX activates epistemologies of the "tourist gaze" and it concentrates on the epistemological dimension of audiovisual spectatorship, thereby adhering to a very different logic of the cinema than that of classical Hollywood.[20]

The specific logic in which the individual spectator has a more active role in shaping the film experience can also be seen in other projection experiments at Montréal. The Canadian Pacific-Cominco Pavilion presented the 20-minute film celebrating youth, *We Are Young*, shown on six screens and created by Francis Thompson and Alexander Hammid.[21] Structurally, this work also turns away from a single protagonist and a clear story line, instead opting for the cross section as a form. Thompson and Hammid collaborated on multi-screen films for expanded cinema formats for more than 25 years, from 1962 to 1988.[22] At the New York World Fair in 1965 the two had created the celebrated multi-screen experience *To Be Alive* for a wide-screen format which was reprised in 1967. Like the Griersonian heritage, this example also extends back to the first wave of the European avant-garde: Hammid was born in 1907 as Alexander Hackenschmied in the Austro-Hungarian city of Linz before becoming one of the protagonists of the Prague avant-garde film scene in the early 1930s, best known is possibly his film *Bezúlčelná procházka* (*Aimless Walk*, 1930). Hammid/Hackenschmied personifies moreover a direct connection between the European and the American avant-garde, the first and the second wave so to speak, as he was married to Maya Deren and collaborated with her on *Meshes in the Afternoon* (1943), a foundational film of the US-independent film movement which had a lasting influence on the US-postwar experimental film. Thompson's career, on the other hand, is similar to Kroitor's as he also came to film via the National Film Board of Canada and worked for the IMAX-corporation in later years.

The Czech pavilion presented *Kino-Automat*, an early interactive work in which each seat is equipped with two buttons and the audience is given repeatedly choices between two options.[23] Actually, these forking paths turned out to make very little difference, as they only amount to a limited number of alternate plots and the end of the story is invariably the same – the house is on fire. The experience moreover demonstrated that the collective choices of the audience (a kind of "wisdom of the crowds"-experiment *avant la lettre*) was always the same, so the implied promise of a wider array of options did not really materialize in practice. Some commentators proposed to see this as a critique of state socialism with its pre-fabricated election results, while others pointed to Western capitalist consumer societies in which the constant choice being given to the individual amount to no real difference in the end – seeming freedom with a limited amount of options, while the end result is already fixed. No matter how it is understood politically, this early example of interactivity points to a different idea of film's functioning and cultural role beyond linearity; it can thus be seen as an early indicator for the cybernetic turn of the media culture. Feedback circuits, the logics of complex system and regulation through observation, but based on an algorithmic logic, not on a human observer were key points of this transformation.[24]

Conclusion

The world has become so intricately interconnected and complex that media no longer serves merely as entertainment (if it ever did), but rather gives us glimpses and insights into specific aspects and modules of reality, ordering and re-ordering images, sounds, sense impressions and arguments in ever-new configurations in order to create perspectives on and of the world. The shift from regulatory and disciplining media regimes in the first half of the 20th century to the techniques of persuasion, feedback and control is a slow one, but I would argue that the examples from the second half of the 1960s provide a glimpse into the changes and transformations that media underwent in the second half of the 20th century. Above and beyond the value of the projection experiments themselves, the world exhibitions can help us to shift our focus from the traditional film study bias on feature length fiction films towards non-theatricals and useful cinema[25] as part of a wider moving image culture, an expanding cinema that has become our everyday reality. In this sense, we need to take different kinds of films and different kinds of uses of films into consideration.

Despite the heterogeneity of the examples presented here, one feature connects all these strands: the explosion and fragmentation of a single perspective which promised a privileged access to the world, as did the classical Hollywood cinema. This new and reconfigured spatial and visual order is equally valid for the multiscreen projections of the 1960, for the splitscreen films produced in Hollywood between 1966 and 1970 (John Frankenheimer's *Grand Prix*, Norman Jewison's *The Thomas Crown Affair*, Richard Fleischer's *The Boston Strangler* and Michael Wadleigh's *Woodstock*, just to name the most prominent ones) as for the arrangement of monitors and screens in an exhibition and for video installation art. These configurations are different from classical cinema insofar as they propose transversal montage, the combination of fragments not in linear succession, but simultaneously in different screens. The spectator is asked to participate in a different way in the meaning-making process of film as the shift of attention between the different image chains is left to the spectator. In an argument connecting the urban experience and the emergent media entertainment industry of the late 19th century to special effects and hypercinematic experiences at the end of the 20th century, Scott Bukatman has proposed the term "kaleidoscopic perception" for a specific form of distributed attention which is "composed of equal parts delirium, kinesis, and immersion."[26] I would add distraction and dispersion, as well as connectivity and real-time feedback to this form of attention in order to characterize the nature of today's typical engagement with media.

Marshall McLuhan has argued that ecological thinking began with the space age – as the human entered outer space, it became possible to look back on planet earth as a finite and self-enclosed entity:

> *Perhaps the largest conceivable revolution […] occurred on October 17, 1957, when Sputnik created a new environment for the planet. For the first time the natural world was completely enclosed in a manmade container. At the moment that the earth went inside this new artefact, Nature ended and Ecology was born. "Ecological" thinking became inevitable as soon as the planet moved up into the status of a work of art.*[27]

At this moment, and even more with the Apollo missions of the 1960s, the earth became an environment as well as an object of the media that could be addressed as such. In this sense, media are not just material tools, mechanical inventions or organisational units, yet media rather create environments that support, suggest, enforce or enable specific uses, but that might also allow other employments and even open up avenues towards tinkering and transformations.

The same Marshall McLuhan, in discussing *Labyrinthe*, has stated: "Multi-screen projection tends to end the story-line, as the symbolist poem ends narrative in verse. That is, multiple screens in creating a simultaneous syntax eliminates the literary medium from film."[28] Later screenwriter and director Paul Schrader might provide an important link here, as the young critic (*1946) published a long article on the films of Charles and Ray Eames in 1970 in which he highlighted the importance of problem solving: "For Eames, problem solving is one of the answers to the problem of contemporary civilization."[29] This would rhyme with the idea that the purpose of film is neither to be found in entertainment nor in storytelling, but rather in a different orientation in the world, as a constantly changing and evolving environment. In this sense, the film is an object like many others: "The Eameses have constructed structures – a house, chair, film – in which people can define themselves not by their idiosyncrasies but by their similarities. These structures permit problem-solving."[30]

If we want to develop a cinema history that is adequate to these challenges, we need to expand it and include examples that are entangled, transnational and intermedial in kind. Such an expanded – and expanding – cinema history encompasses expanded cinema (in Gene Youngblood's sense), the global history of documentary (through its relations to the Canadian non-fiction tradition), big-budget mainstream filmmaking (thanks to its influence on Hollywood filmmaking) as well as on the history of exhibition beyond the traditional movie history (IMAX etc.), but it does not stop there, as it helps to transfer our expertise into other fields and disciplines. Expanding our field therefore not only gives us new objects to scrutinise, but also increases the relevance of what we are doing for understanding the past and present of the world we live in.

Notes

[1] See for a valuable reconstruction and discussion of many central cinematographic attractions Monika Kim Gagnon, Janine Marchessault (eds.), *Reimagining Cinema: Film at Expo 67*, McGill-Queen's University Press, Montréal 2014.

[2] Gene Youngblood, *Expanded Cinema*, Studio Vista, London 1970.

[3] See my "1967 – how to write the media history of a single year?," in Alberto Beltrame, Giuseppe Fidotta, Andrea Mariani (eds.), *The Borders of (Film) History*, Forum, Udine 2015, pp. 411-418. Recently, the year has also become the focus of attention in cultural history, more specifically concentrating on the phenomenon of pop; see Robert Stockhammer, *1967. Pop, Grammatologie und Politik*, Wilhelm Fink, Paderborn 2017; Ernst Hofacker, *1967. Als Pop unsere Welt für immer veränderte*, Reclam, Stuttgart 2017.

[4] Lisa Parks, *Cultures in Orbit. Satellites and the Televisual*, Duke University Press, Durham (NC) 2005.

[5] See Gilles Deleuze, "Postscript on the Societies of Control," in *October*, vol. 59, Winter 1992, pp. 3-7.

[6] For a related take on these transformations see also Malte Hagener, "Where Is Cinema (Today)? The Cinema in the Age of Media Immanence," in *Cinéma&Cie*, (special number "Relocation" edited by Francesco Casetti), no. 11, Fall 2008, pp. 15-22.

[7] Michael Werner, Bénédicte Zimmermann, "Beyond Comparison. Histoire Croisée and the Challenge of Reflexivity," in *History and Theory*, vol. 45, 2006, pp. 30-50.

[8] For more on ecological ideas in relation to media and McLuhan see Janine Marchessault, *Ecstatic Worlds: Media, Utopias, Ecologies*, MIT Press, Cambridge (MA) 2017, and Id., *Marshall McLuhan: Cosmic Media*, Sage, London 2005.

[9] Rhona Richman Kenneally, Johanne Sloan (eds.), *Expo 67. Not Just a Souvenir*, Toronto University Press, Toronto et al. 2010 provides a general overview in which media forms but one element.

[10] A brief overview of the multi-screen-projections can be found in Janine Marchessault, "Multi Screens and Future Cinema: The Labyrinth Project at Expo 67," in Susan Lord (eds.), *Fluid Screens, Expanded Cinema*, University of Toronto Press, Toronto 2007, p. 36f.

[11] Cornelius Borck, "Der Transhumanismus der Kontrollmaschine: Die Expo 67 als Vision einer kybernetischen Versöhnung von Mensch und Welt," in Michael Hagner, Erich Hörl (eds.), *Die Transformation des Humanen. Beiträge zur Kulturgeschichte der Kybernetik*, Suhrkamp, Frankfurt am Main 2008, pp. 125-162, here p. 149.

[12] Judith Shatnoff, "Expo 67: A Multiple Vision," in *Film Quarterly*, vol. 31, no. 1, Fall 1967, pp. 2-13, here p. 2.

[13] For some of the key titles that have shaped the debate about post-cinema see D.N. Rodowick, *The Virtual Life of Film*, Harvard University Press, Cambridge (MA) 2007; André Gaudreault, Philippe Marion, *The End of Cinema? A Medium in Crisis in the Digital Age*, Columbia University Press, New York 2015; Francesco Casetti, *The Lumière Galaxy. 7 Key Words for the Cinema to Come*, Columbia University Press, New York 2015; Malte Hagener,

Vinzenz Hediger, Alena Strohmaier (eds.), *The State of Post-Cinema. Tracing the Moving Image in the Age of Digital Dissemination*, Palgrave Macmillan, London 2016.

[14] Harry F. Waters, Lynn Povich, "Expo 67: Fairest of All," in *Newsweek*, vol. LXIX, no. 18, 1 May 1967.

[15] A more detailed account of their respective roles is provided by Seth Feldman, "Minotaur in a Box: The Labyrinth Pavilion at Expo 67," in Monika Kim Gagnon, Janine Marchessault (eds.), *Reimagining Cinema: Film at Expo 67*, cit., pp. 27-54.

[16] A detailed contemporary description of *Labyrinthe* can be found in Barry Day, "Beyond the Frame," in *Sight & Sound*, vol. 37, no. 2, Spring 1968 pp. 80-85, 81f.; archaeological reconstructions are Janine Marchessault, "Multi Screens and Future Cinema: The Labyrinth Project at Expo 67," cit., pp. 29-51; Ben Highmore, "Into the Labyrinth: Phantasmagoria at Expo 67," in Rhona Richman Kenneally, Johanne Sloan (eds.), *Expo 67. Not Just a Souvenir*, cit., pp. 125-142; Monika Kim Gagnon, Janine Marchessault (eds.), *Reimagining Cinema: Film at Expo 67*, cit., pp. 25-54.

[17] For a collection of Grierson's texts see Forsyth Hardy (ed.), *Grierson on the Movies*, Faber and Faber, London 1981. See also Ian Aitken, *Film and Reform. John Grierson and the Documentary Film Movement*, Routledge, London-New York 1990 and for the impact of Grierson see Zoe Druick, Deanne Williams (eds.), *The Grierson Effect: Tracing Documentary's International Movement*, British Film Institute, London 2014. A wider context which situates film within broader contexts of capitalism and liberalism is provided by Lee Grieveson, *Cinema and the Wealth of Nations. Media, Capital, and the Liberal World System*, University of California Press, Oakland (CA) 2018.

[18] On Expo 67 in this respect see Cornelius Borck, "Der Transhumanismus der Kontrollmaschine: Die Expo 67 als Vision einer kybernetischen Versöhnung von Mensch und Welt," in Erich Hörl, Michael Hagner (eds.), *Die Transformation des Humanen. Beiträge zur Kulturgeschichte der Kybernetik*, Suhrkamp, Frankfurt 2008, pp. 125-162. See also for the underlying transformations Andreas Reckwitz, *Die Erfindung der Kreativität. Zum Prozess gesellschaftlicher Ästhetisierung*, Suhrkamp, Berlin 2012; Fred Turner, *From Counterculture to Cyberculture. Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*, University of Chicago Press, Chicago-London 2006; Fred Turner, *The Democratic Surround. Multimedia & American Liberalism from World War II to the Psychedelic Sixties*, University of Chicago Press, Chicago-London 2013.

[19] See http://www.filmreferencelibrary.ca/index.asp?layid=46&csid1=305&navid=46, last visit 31 July 2018, for a short biography of Kroitor; for a history of the IMAX Corporation see Allison Patricia Whitney, *The Eye of Daedalus. A History and Theory of Imax Cinema*, Unpublished PhD dissertation, University of Chicago 2005. See also Seth Feldman, "Tiger Child: Imax and Donald Brittain Times Nine," in Zoë Druick, Gerda Cammaer (eds.), *Cinephemera. Archives, Ephemeral Cinema, and New Screen Histories in Canada*, McGill-Queen's University Press, Montréal-Kingston 2014, pp. 159-183.

[20] Charles R. Acland, "IMAX Technology and the Tourist Gaze," in *Cultural Studies*, vol. 12, no. 3, 1998, pp. 429-445.

[21] For an analysis see Anthony Kinik "Celluoid City: Montréal and Multiscreen at Expo 67" as well as the reprinted documents, in Monika Kim Gagnon, Janine Marchessault (eds.), *Reimagining Cinema: Film at Expo 67*, cit., pp. 104-133.

[22] On Hackenschmied/Hammid see Michael Omasta (ed.), *Tribute to Sasha. Das filmische Werk von Alexander Hammid. Regie, Kamera, Schnitt und Kritiker*, Synema, Wien 2002. For an obituary see Kathryn L. Shattuck, in *The New York Times*, 9 August 2004.

[23] On this work and its context see Vít Havránek, "Laterna Magika, Polyekran, Kinoautomat," in Jeffrey Shaw (ed.), *Future Cinema. The Cinematic Imaginary after Film*, MIT Press, Cambridge (MA) 2003, pp. 102-107; Erkki Huhtamo, "Push the Button, Kinoautomat will do the Rest! Media-archaeological Reflections on Audience Interactivity," ca. 2007, in Booklet accompanying DVD, to be found online at http://gebseng.com/media_archeology/reading_materials/Erkki_Huhtamo-Kinoautomat.pdf, last visit 31 July 2018; Marina Hassapopoulou, "Interactive Cinema from Vending Machine to Database Narrative: The Case of *Kinoautomat*," *Screening the Past*, issue 37, 2013, http://www.screeningthepast.com/2013/10/interactive-cinema-from-vending-machine-to-database-narrative-the-case-of-kinoautomat/, last visit 31 July 2018.

[24] See also the contribution to the special section "Medienästhetik," in *Zeitschrift für Medienwissenschaft*, no. 8, 1/2013.

[25] See, as an example of a wider trend, Charles Acland, Haidee Wasson (eds.), *Useful Cinema*, Duke University Press, Durham (NC)-London 2011.

[26] Scott Bukatman, "Zooming Out: The End of Offscreen Space," in Jon Lewis (ed.), *The New American Cinema*, Duke University Press, Durham (NC)-London 1998, pp. 248-272, here p. 256.

[27] Marshall McLuhan, "At the Moment of Sputnik the Planet became a Global Theater in which there are no Spectators but only Actors," in *Journal of Communication*, vol. 24, 1974, pp. 48-58, here p. 49.

[28] Marshall McLuhan, *Counter Blast*, McClelland and Stewart, Toronto 1969, p. 24.

[29] Paul Schrader, "Poetry of Ideas: The Films of Charles Eames," in *Film Quarterly*, vol. 23, no. 3, Spring 1970, pp. 2-19, here p. 4.

[30] *Idem*, p. 6.

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The Space Frame and the Architectural Screens in Displacement: Inside Montréal's Expo 67 from the Past Until Today

To mark the 50th anniversary of Expo 67, the Musée d'art contemporain de Montréal (MACM) presented last summer *In Search of Expo 67*, a major exhibition of new works by Canadian Artists, inspired by Expo 67. With this archaeological and historical perspective of the exhibition's fate in other places, it's necessary to question the traces of remains and erasures in Expo 67. This fair was considered as an heterotopy feeding a post-modern world from a futuristic inspiration.[1] Starting from the "Space Frame" concept, a focus will be established around architectural screens and their relationship to the urban setting. We could evoke the presence of a computer-tinted screens – to regulate the temperature of the structure – in the geostatic dome of the "United States Pavilion" (fig. 27) as assumed the transparency of a world affected by a constant displacement (sometimes open, sometimes closed on itself). The various films which projected on the principle of fragmented screen, invite a reflection concerning a possible (re)sedimentation of space – necessarily heterogeneous – within Canada as a unifying nation. For example, the multiple-screen panorama at the "Pavilion du Havre" through Roman Kroitor's film *In the Labyrinth*, or the maze of concave screens that surrounds the viewer at the "Bell Pavilion." Other pavilions-installations may be covered such as the "Canadian-Pacific Pavilion" and its kaleidoscope of curved screens that those invite the viewer to play with his five senses in the film *We Are Young* or the "Canadian-National Pavilion" explores the movement and time theme in Vincent Vaitiekunas's film *Motion* – a 70mm film curved on a big screen.

The interaction between the screen display and the architectural structure of the pavilions will find extension with their contemporary reinventions. Marie-Claire Blais and Pascal Grandmainson investigates Expo 67's traces by shooting some images on the original event location (fig. 28). More precisely, Jean-Pierre Aubé echoes the "Kaleidoscope Pavilion" in a time-lapse video full of psychedelic effects (fig. 29). Finally, Charles Stankievech proposes to interact with the impressive architecture of Buckminster Fuller's dome ("United States Pavilion") in his installation (fig. 30). Beyond the diachronic time and how did they architectural screens contributed to changing our relationship to the moving image, how does Expo 67 and its audiovisual text become an extension of the city's physical space under construction? How did some pavilion's architecture was connected to the screen structure of the films inside (like an echo between the contents and container)? In what sense can they have been said that the contemporary update of some pavilions inside the museum's white cube was working a displacement's heterotopy? In this case, the pavilion's architecture becomes screen as much as a material point of view than a metaphoric one which acting a diaphanous effect.

Drawing from memory: Montréal's islands and the dialectic image

One of the most challenging but still controversial decision for Montréal's Expo 67, it's the reorganization of St. Lawrence River when the organizers announced that they had found a rather than unusual solution for their problem due to Montréal Mayor Jean Drapeau lobbied to hold the fair in the city. In this way, they would build their fair in the middle of the St. Lawrence River. What was become Expo 67 was originally two islands, Île Sainte-Hélène and Île Ronde, and a section of the city's port facilities. These areas were not nearly large enough to hold all the pavilions planned for the fair, even if they were expanded, so a completely new island, Île Notre-Dame, was built. An estimate 28 million metric tons of rock and dirt were needed to build out the site, much of it coming from the excavations for the new Montréal subway system, expansion of the St. Lawrence Seaway, and by dredging the river near the construction site. When completed, the site was slightly over 1,000 acres. It's interesting to see that the topography of the Expo 67 site was formed from the remains of an underground world – the rocks and others stones evacuated from the city's basements – in order to create an artificially architectural and technological showcase of a utopian and at least ephemeral world: all of the buildings, except "The Round Park" and the "United States Pavilion" – now "The Biosphere" will be destroyed in 1984. From the shadow to the light, a resettable movement characterize this monumental construction. All of these vibrant pavilions were modeled from the shadow on which their structures reside. Based on a time-space reflection in a contemporary context, Marie-Claire Blais and Pascal Grandmaison explore in *The Path of Enigma* (2017), the phenomena of presence and erasure that have shaped the Expo site. They are focused on the displacement of matter that constituted its construction and continues incessantly today. As the artists said:

> *The radical transformation of the shape of île Ste-Hélène, the dissolution of its former configuration and its current vacuity seemed to be revealing the ideals propagated during Expo 67. Its contradictory pathways that are still being reflected in our perception of progress. We took a good look at that.*[2]

Both artists haven't lived Expo 67 and this film project concerns the dissolution of its ancient configuration and its current artificiality. The film consists on a series of succeeding close-up or tightened shots with the hands and the legs of the performer – probably Marie-Claire Blais's body – to build small gravel's sculpture (figg. 31-32). The editing is based on cut-splice does not prevent any coherence inside the sequence's development and the elaboration of these ephemeral works. Some images are following these different scaffolds, which form some rubble's pile. The camera revolves around the object that is gradually constituted under our gaze, working the frame with some axis connections, closest and distancing effects (figg. 33-34). If artists use the sound of wind, water and stones that fall to each other, these natural elements have been sampled as a reflected echo. As a result, the film creates a synthetic soundtrack that seems to increase the body's gestures in an abstract environment. The embankments and debris's of the material are transposed by the alternating juxtaposition of a performative action and its opposite during the sequences. A game embodied by the confrontation of our personal interpretation as a duet of artists: that's the reciprocity between the spontaneity of the gesture and the framing's transcription. In a displacment gesture, the screening of the film inside the museum's black box amplifies the scales ratio of theses matter's elements. In the gallery and on a large screen, it's less Sainte-Hélène's Island as a whole thing than a determining element apparently insignificant. In this case, the stones and their transformations during the projection – in a magnifying effect – gives the impression to be transported on the original site.

To understand the magnitude of this discrepancy, we must see in this film the factors of appearances and deletions which reveal the contradictions of the site and its history. The succession of matter's movements, additions and extractions – which are the origin of this artificially creation –, makes me think about Robert Smithson's *Spiral Jetty* (1970). As Marie-Claire Blais and Pascal Grandmaison's sculptures in *The Path of Enigma*, Robert Smithson's *Spiral Jetty* was built of mud, salt crystals and basalts rocks. In both cases, the conception of time is based on a perceptual movement – what Smithson calls entropy – in an apparent and relative fixity. In a text entitled "Causes and reasons for deserted islands" (1950), Gilles Deleuze said:

> *It's not enough that everything starts; everything must begin again, once the cycles of possible combinations has come to completion. The second moment does not succeed the first: it is the reappearance of the first when the cycle of the other moments has been completed. The second origin is thus more essential than the first, since it gives us the law of repetition, the law of series, whose first origin gave us only moments.*[3]

In relation to this quotation, the artists try to feel a kind of vertigo between what event evokes today and the absence of vestiges that testify to it. This film encourages us to scrutinize the site of this world's exhibition in order to reveal the clues of its past: such as the image of a material archeology inspired by Walter Benjamin who seeks in debris some traces of a possible story. *The Path of Enigma*, and more widely this exhibition, represents a possible dialectical image in sense where Benjamin poses the concept in *The Arcades Project*.[4] Despite the insistence of his claims, it's been difficult to find on his own writing a "real" dialectical image. It's not all clear whether such an image belongs to material or virtual reality, whether it's something more like a picture or a perception but it's clear that as Benjamin said:

> *A dialectical image is what the formerly meets the now, in a flash, to form a constellation […] In other words, image is dialectics at a standstill. For while the relation of the present to the past is a purely temporal, continuous one, the relation of what-has-been to the now is dialectical: is not progression but image, suddenly emergent. Only dialectical images are genuine images (that is, not archaic); and the place where one encounters them is a language.*[5]

The problem concerns the centrality of dialectical image for Benjamin's own understanding of the specifically new methodological foundation of the work is matched by the obscurity of the notion of dialectical images. A very small number of tightly packed and often hermetic doctrinal statements do not add up to anything approaching a "theory" of the dialectical image, or certainly not one elaborated enough to serve as a perspicuous guide in *The Arcades Project*. But it's true that Benjamin regarded the dialectical image as the methodological heart of his essay as a central element for his critical theory of history. In *The Path of Enigma*, the film's stone comes to dig a hole in the real: like a flash that crosses the horizon, the past of Expo 67 seems to be restored and producing a kind of a mental picture. The film helps us to recognize the past in a place that seems incomplete and always open.

The "Space Frame" concept and the architecture as a screen projection

The futurist architecture of the pavilions is one of the most important attractions of Expo 67. The 62 countries announced their imagination and creativity so that their installation leaves the most striking and refined impression. To do this, the best architects are required to provide stunning buildings such as the "United States Pavilion" with the iconic geodesic Dome, the "West Germany Tent Lodge," the "Australian's Glass Pavilion," the "Netherlands Pavilion" or theme's pavilions like "Man the Explorer" and "Man the Producer." These buildings excite the public by their original design, their technological innovation (facility of assembly, transportation, lightness) and the choice of some unconventional materials (plastic or acrylic canvas, aluminum pipes). But it seems that the architects try to catch two other goals: the desire to separate our work from the monotonous boring buildings that govern the architecture of previous years and the challenge which consists of covering the largest area with the least amount of materials and the lowest coasts. Expo 67 sees a new architectural concept begins there: the "Space Frame." It consists – among other things – to move structures easily, to enlarge or reduce them as needed and, above all, to break them down into several other structures of various shapes. More specifically, the "Space Frame" is defined by its reliance on the inherent structural strength of the equilateral triangle when pressure is applied to the point at the top. In fact, tow sides of a building are connected to the point which compress naturally while the bottom leg confers a stability that prevents further collapse of the shape (fig. 35). The computer's development made it easier to better calculate and model stresses on structures and material. Alongside the quality improvement and the ability to precisely and affordably craft metal frames, you could build on larger scales – in the 1950s and 1960s – which was not possible before. In any case, the concept was not very efficient before Richard Buckminster Fuller developed the "Space Frame" into modeled shapes like the tetrahedron, which had incredible stability and light weight (fig. 36). He was able to construct some structures that not only were stable but became stronger as buildings grow. While the geodesic domes constructed before 1967 were generally hemispherical in shape, three-quarters of Fuller's 20-storey pavilion – his original proposal was twice the size – remains visible.[6] The structure is a three-dimensional metal frame slightly over one-metre thick at the base, and gradually thinning towards the top. At the time, it was covered by a transparent skin composed of acrylic panels. To keep the indoor ambient temperature at an acceptable level, Buckminster Fuller designed an apparatus composed of mobile triangular panels that would move over the inner surface of the dome following the sun. Although brilliant on paper, this innovation was probably too advanced for its time, and never worked properly. Instead, a large number of valves were installed in the centre of acrylic panels, to enable the pavilion to "breathe." The most important thing concerning the dome, comes from its external structure that is completely isolated from its internal structure. Platforms, escalators and elevators never touch the outside walls, which accentuates the dynamism of this freestanding structure. This dynamism was launched by the spherical nature of the building and by a centrifugal space as a result of some visual forces. As Rudolf Arnheim says in *The Dynamics of Architectural Form* (1977), there are two types of spaces: the first one, which comes from Platon in the *Timée*, tell us that space is a nothingness, a void but that exists physically as an entity in the outside world. In other words, space would still exist as an empty boundless container: "Space is the mother and receptacle of all things created and visible or at least sensible."[7] The second one, which is based on physical's achievements, tells us that space is defined by the measurement of contiguous objects or material fields. In this case, the distance, which separates existing objects, creates the space and it cannot be conceived as a physical object. Consequently, the perception of space is only possible in the presence of perceptible objects and the Cartesian coordinate system is non-existent in this space. So, it will be necessary to assign a one-dimensional axis (between two objects of this space) that will determine the dimensions and directions. Like this, the overall configuration – axes – will be defined physically and psychologically in relation to the function and importance of each object. For Arnheim, the difference between the two conceptions of space has fundamental consequences. In the first conception, where the space as a container that would still exist even if it was completely empty, the dome's spatial position will appear from an absolute base of reference: all distances, velocities or sizes have equally absolute measurements. Its spatial position can be determined by three coordinates indicating the distances from the point of reference. But in the fair's context and more widely in an urban space context, the pavilion must be understood like an ambient space. In this kind of construction, it's more difficult for us to keep our landmarks when we deny the existence of an absolute space. Therefore, the sphere does not have a three-dimensional framework. This brings us back to the second conception of space: "There is no up or down, no left or right and no determinable distance of any kind […] Space is, in this case, a centrically symmetrical sphere of infinite expanse."[8] In the geographical organization of Expo 67, the "United States Pavilion" dominates the site and gives the impression that some visual forces are following a centrifugal expansion. Unlike more classical constructions where the horizontal line produces a brutal break between architecture and the sky, the circular dome seems to be advancing into the environment (fig. 37). This metaphoric dome's expansion involves an interactive aspect, giving coherence to the project as shown by the possibility of being able to cross it through the minirail transportation system. As a result, the structure gives the impression of being a fixed – due to the tetrahedron construction – but a moving point – the tactile space of the sphere –, which returns the pavilion to its unstable space. In his second conception of space – the dynamic movement –, Arnheim said that it's possible to make a focus on the juxtaposed triangles themselves covered with plastic as a screen effect. Even if the refraction's effect is less important or precise than the natural glass, the dome's plastic glass provides a constant apparent movement like a screen on which the world is projected. It also gives an effect of simultaneity: the plastic's glass surface of the building and the reflections it produces are perceptible during the same time. As for a cubist painting, the plans are crushed where the dome's surface is melting in a single image which is carried by the entire structure. Some cells are obscured by stretched panels in a screen-controlled system, which filter the sunlight (this effect suggests an illusion of a terrestrial globe). With a heat sensor coupled to a small motor, the triangular blinds's deployment was set according the outdoor-indoor temperature difference. The cells were covered to hide the sun and prevent the excessive diffusion of its heat inwards and the sunlight projection that will densify and come to animate these triangular surfaces of the plastic screen. As Kate Mondloch says in her book *Screen: Viewing Media Installation Art* (2010), a screen is composed of several elementary elements like "space, materials, embodiment, duration, and participation."[9]

The city and the museum, from one heterotopy to another

If the dome's spectator experience during the fair was a travel day in an exterior-interior movement more than really crossing the composite air cell's displays, we could see in Charles Stankievech's multimedia installation – *Until Finally O Become Just a Dot* – a new reflexive modalization of the dome, from the original site to the offsite museum project. The artist definises his project as an interaction between the outdoor-indoor aspects of the sphere in these terms:

> *I electrified Buckminster Fuller's metal geodesic dome from Expo 67 in order to turn it into a gigantic spherical radio antenna. The museum exhibition included an archival presentation of Buckminster Fuller's evolution of architecture from his original 1927 "4D Tower" with a radio mast through his 1950's military work building radone for the Distant Early Warning Line to shelter radio equipment, assisting the birth of cybernetic, networked warfare. The museum included an 8ft copper geodesic dome that functioned as the antenna for a local low power radio station within the gallery, and onsite i repurposed the original Expo 67 geodesic dome turning it into an experimental radio transmitter. Both geodesic antennas played the same archival broadcast playlist including.*[10]

Charles Stankievech has assembled a bulging archive of materials that limn the contradictory aims of Fuller's dome, as indebted to American military ambitions as to "Spaceship Earth" environmentalism. The main interest of this contemporary experience concerns the dome's migration and its reenactment at a miniaturized scale for the museum's white cube specific space. This interaction between the two sites of the dome allows it to recover both sides of the structure in a displaced geographic place. This movement confronts the spectator in a visual and sound environment where the huge scale of picture's displays generates a new reflection of the dome's historical background, less optimistic and more ambiguous. Not many people remember about this fact, but the Buckminster Fuller's architectural dome's vision, in other cases and projects, served for military purposes in the Canadian Arctic but also for protest camps in an ecological point of view. The paradoxes of technology left by the 1960s and the Cold War, was resumed by this historical event in one photography which takes place in the white cube: the acrylic panels went up in flames in 1976, and the dome was vacant for years. To resume, Stankievech's project engages with the entanglements of contradictory ideologies, from the evolution of Fuller's geodesic domes as easily portable military structures in the Canadian Artic to his counter-cultural late 1960s until his contemporary legacy.[11] Finally, this positive development shows us another displacement from the screen as a medium's interface to the radio as another complex medium. This question reminds me Rudolf Arnheim's perception of the radio system in his essay – *Radio* (1971),[12] which is not an ontological or a metaphysical problem – he keeps away from both sanctifications and demonizations of this technological object. In this double distance, Arnheim reveals the technique in general and the radio in particular as a moral and political problem. From the "Man and his World" main thematic during Montréal's World Fair, we could change this term like the "Man and the Medium" project due to its contemporary and new developments.

The Musée d'art contemporain doesn't conceive Expo 67 as a simple retrospective in a nostalgia sense. In contrast, the MAC treats it as a new starting point for new creation and reflection. I chose to focus my remarks in two dimensions: on the dialectical image that emerges through Marie-Claire Blais and Pascal Grandmaison's film *The Path of Enigma* and on the redeployment of the "Space Frame" from Buckminster Fuller's dome and its effective relocation in Charles Stankievech's project. Overall, the artist's work is based on documentation of what was built and done on the site, and on the haze if ideas that accompanied Expo's creation and continued to mutate after it ended. All this works provokes you to think about Expo in ways as specific, critical and elastic. They shatter the spirit of Expo 67 into a dynamic mass of phenomena and attitudes. If that Expo was revolutionary because it marked a change in the focus of world's fair, from displays of current gadgetry to collective dream about what the future would like, many artists have shown that Expo's power as a predictive event was much more nebulous. It was a world's fair, the major contents of which were curated by nation-states and displayed in national pavilions. Beyond its iconic appearance, the dome represents this contradictory dual entity who travels Expo 67: a mixture between optimism (an envy of the certainty in cultural and social advancement felt by the millions who passed across this island and an envy shared, by many of the artists in MAC's exhibition) and pessimism (the nationalism inside Expo 67's narrative display). At least, one of the more important things in this contemporary reinterpretation of the fair is to admit why artists are still infatuated with past visions of the future that didn't come true. Does this mean that the exhibition proposed by the MAC reactivates in a differential way the complex notion that we should call a "progressive utopia?" From universal exhibitions to museum exhibitions, the moving image has proved to be a unique field of exploration for rethinking our relationship to the affected object, but even more to the integration of space-based observations. And this project proves that it will be advisable to not consider the exhibition's place as a simple pretext to speak about the moving image.

Illustrations

27. The geostatic dome of the "United States Pavilion." Photo: Internet Source.
28. *The Path of Enigma*, Marie-Claire Blais and Pascal Grandmaison. View of the exhibition *In Search of Expo 67* presented at the Musée d'art contemporain de Montréal from June 21 to October 9, 2017. Photo: © Guy L'Heureux.
29. *Kaléidoscope II*, Jean-Pierre Aubé. View of the exhibition *In Search of Expo 67* presented at the Musée d'art contemporain de Montréal from June 21 to October 9, 2017. Photo: © Guy L'Heureux.
30. *Until Finally O Become Just a Dot*, Charles Stankievech. View of the exhibition *In Search of Expo 67* presented at the Musée d'art contemporain de Montréal from June 21 to October 9, 2017. Photo: © Guy L'Heureux.

31-34. *The Path of Enigma*, Marie-Claire Blais and Pascal Grandmaison. View of the exhibition *In Search of Expo 67* presented at the Musée d'art contemporain de Montréal from June 21 to October 9, 2017. Photo: © Guy L'Heureux.

35. The "Space Frame" structure: *Equilateral Triangle*. Photo: Internet Source.
36. The "Space Frame" structure: *The Tetrahedron System*. Photo: Internet Source.
37. The geostatic dome of the "United States Pavilion," R. Buckminster Fuller, S. Sadao, P. Chermaye, T. Rankie, I. Chemaye, 1967. Photo: © Estate of Buckminster Fuller.

Notes

[1] Montréal's Expo 67 arrives shortly after the New York World's Fair (1964-1965), another example of a fair whose theme evokes a futuristic and interactive world as a showcase of mid-20th century American culture and technology. The nascent Space Age, with its vista of promise, was well represented. The Fair didn't receive official sanctioning from the Bureau of International Exposiitons (BIE), although considered as a universal and international exhibition with "Peace Through Understanding," dedicating to "Man's Achievement on a Shrinking Globe in an expanded Universe" (American companies like IBM and the famous Charles and Ray Eames' pavilion dominated the exposition as exhibitors).

[2] Marie-Claire Blais, Pascal Grandmaison, "Exhibitions artists," *In Search of Expo 67*, http://cinemaexpo67.ca/expo/artists/, last visit 10 July 2018.

[3] Gilles Deleuze, "Causes and reasons for deserted islands," in *Desert Islands and Other Texts (1953-1973), Semiotexte*, MIT Press, Cambridge (MA) 2004, p. 13.

[4] Walter Benjamin, in Rolf Tiedemann (ed.), *The Arcade Project (Walter Benjamin Studies)*, Belknap Press, New York 2002.

[5] *Idem*, p. 462 [N2a,3].

[6] Once again, the fascination for spherical structures reminds us the last New York World's Fair whose symbol was a 12-story-high, stainless-steel model of the earth called "The Unisphere," built on the foundation of "The Perisphere" from the 1939 NYC Fair.

[7] Rudolf Arnheim, *The Dynamics of Architectural Form*, University of California Press, Berkeley-Los Angeles, p. 65.

[8] *Idem*, p. 10.

[9] Kate Mondloch, *Screen: Viewing Media Installation Art*, University of Minnesota Press, Minneapolis-London 2010, p. 3.

[10] Charles Stankievech, *Vimeo personal page*, https://vimeo.com/223217808, last visit 10 July 2018.

[11] Since 1995, the dome was been rechristened "The Biosphere" when it became an environment museum with a focus on the climate change. It offers interactive activities and presents exhibitions about the major environmental issues related to water, climate change, air, ecotechnologies and sustainable development.

[12] Rudolf Arnheim, *Radio – An Art of Sound* (*Rundfunk als Hörkunst*), Da Capo Press, New York 1936.

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Projective Monuments: Moving Images, Architecture and World Fairs

The exposition of moving images in world fairs and expos is a topic that lends itself most productively to approaching a History of Cinema Without Names, as these events often transcend traditional categories of authorship, works, schools and movements in film history. Instead, the topic ties in with issues of media technologies, real or imaginary, and their historical and projective roles within a both national and international framework. In this article, I aim to focus on architectural and temporal aspects of moving image projections in international fairs and exhibitions. These projections are spatial in the obvious sense that film projections often take place in purpose-built spaces during world fair events, which connects moving images to architectural projects. The design of the space tells us something about the current idea, and the horizon of expectation, of the moving image at the time. These projections are also temporal in the sense that world expos often commemorate and celebrate the past in order to project a future, i.e. to accommodate the new within a historical framework. Furthermore, they are also temporary events, lasting for planned duration, and as such ephemeral architectures with a planned obsolescence. The intersections between moving image technologies and architecture offer specific cases for reconceptualizing the interconnections between two spatial and temporal media.

My two examples will be the 1897 Stockholm Art and Industry Exhibition, where film programs were exhibited together with demonstrations of X-rays in a reconstruction of medieval Stockholm built for the event, and the 1970 Osaka World Expo, where a huge number of "expanded" film formats were showcased in purpose-built venues. Among these formats were the first IMAX screening, triangular screens, and a new technique for 3D cinema (in the Soviet pavilion). Some of the film screenings were embedded in spaces of metabolist architecture, and the 1970 Osaka Expo is often seen as the culmination of metabolist architecture. Such periodization can of course always be contested, but what is of interest in my view is how metabolist architecture relied on computer designs and interfaces, and took a cybernetic approach to cities as media.[1]

Cinema and (world) exhibitions

Both the (primarily national) Stockholm exhibition and the Osaka Expo '70 point towards three possible ways to approach the interconnections between the dispositives of cinema and expos:

– *The exhibition as a site of moving image technologies*: The expos often *display* emerging moving image technologies as attractions in their own right, where the content of the images themselves often become secondary. The media become the message, as Marshall McLuhan would observe much later. The expo context for this reason replicates the mode of reception of the first years of cinema, where movement itself, with its the multiple possibilities of projections, often was the main attraction. Instead of emphasizing content and narrative, the exhibition mode highlights the media networks of moving images. As we will see in both cases discussed here, the expo also acted as a switching board to connect between different media.

– *Films as sites and documents of exhibitions*: The expos are always temporary events, lasting a few months, and then closing down and being partially or fully dismantled. For this reason, visual media are also used to "preserve" them for the future. Photos and films are together with written descriptions often the only means to reconstruct these historical events. While expos are the architectural premise enabling specific modes of film screenings, films are part of a media network enabling the afterlife of expos. A conflation between the role of films as the content of the expo, on the one hand, and its documents on the other, emerge in the many cases where films showing the fair grounds and specific events as its opening were also part of the expo. As these films' screening context necessarily is lost with the closing and dismantling of the expo, this role highlights theoretical issues of reception, documentation and historiography.

– *Films and exhibitions as related dispositives*: Another connection between world fairs and moving images are established on a different level, as both were media of modernity, displaying a heterotopia and heterochronia of fragmented time and space. Expos brought together a selection of attractions from different parts of the world, juxtaposed and edited together in ways resembling the editing of a film. Even the first films, consisting of single shots, display a panorama of the world, as demonstrated by the travelling cameramen of the Lumière company and their screenings around the world. These shared features of modernity of cinema and world expos also coincide in the fact that both films and expos are ephemeral events. The expo is constructed for display for a few months, just as films run in theatres for a limited time, and in many cases are lost forever after that. In later moving image technologies, as in analogue or digital video, the ephemerality is reconfigured but often enhanced.

The Stockholm Exhibition

The Stockholm Art and Industry Exhibition of 1897 demonstrates all of these interconnections. It opened in May 1897 and closed five months later. Among its many pavilions, it is notable that the exhibition of the two most recent media of the expo – film and Röntgen rays – took place in rooms within a half-sized reproduction of the medieval Old Town in Stockholm (fig. 38). While more well-known displays at the time, as the diorama, were presented in other venues, the cinematograph and the X-rays had to be embedded in a long historical tradition. This shows, I want to argue, how the introduction of the new medium demands to be integrated in the past, and most importantly in the history of the nation, in order to secure a continuity of identities and values. Another telling sign of this national historical function is that the image of the King Oscar II opening the Expo on May 15th featured prominently in the film program. The medium may be new, but what it shows is historical continuity and social stability (fig. 39).[2]

The moving images screened during the exhibition are the first film shots produced in Sweden, even if there had already been previous screenings of foreign material. The shots of the King were developed immediately and projected for the King in a private screening at the Royal castle the same evening, upon which the King is reported to have said the he "appreciated highly to see himself on the white screen,"[3] thereby sanctioning the merits of the new medium. Early cinema programs often brought together dignitaries and historical events with the anonymous people and everyday scenes. The King's opening of the exhibition was for this reason projected together with a staged fight by a watermill in the old town replica (during the expo, there were also actors engaged to stage such fights in the same area). Everyday life – where fights seem to have made up a central part in Swedish society – is juxtaposed with the head of state to secure a link between the nation state and its subjects, the very tissue making up a national identity and an ethnicity: what it is to be Swedish.

The King was not only documented on film, but his speech was also recorded on a phonograph and played at the Expo (actually, his speech is read by an actor with a similar voice and diction. We can only speculate why: perhaps because the sound recording was not good enough since microphones or because of a speech impediment – a common feature among royalties of Europe). The King's reenacted voice served the same purpose as his image, of securing a link between the heterogeneous displays of attractions and historical and national continuity. This makes the King a point of continuity within the media connectivity of the Expo. The King acts as a corporal relay between the phonograph and the moving image, and his pseudo-presence ameliorates the passage between these media and the stereographs and dioramas of the exhibition. The most telling media connection may be that also the X-rays were embedded in the historical reconstruction of the Old Town, in a space adjacent to the film screening, telling the visitors that also this ghostly medium is to be identified within historical continuity. Visitors were invited to have their hand X-rayed and to see the image of their knuckles and bones projected on a screen.[4]

At the same time, these images are also projections into the future. Bertha Röntgen, the inventor's wife, had an eerie premonition of this futurity upon seeing the X-ray of her hand for the first time, stating: "I have seen my own death." Not only expos and films, but also human lives, are ephemeral. The effects of X-ray radiation are well-known today, but they were not in 1897.[5] The archives don't tell of the number of people dying from the radiation of the X-ray machine of the Expo, but they tell us that these media will continue to be active in the future. The overall media configuration of the Expo serves to instigate a future of a society through its foundation in a historical past, with architectural replicas and the King as its nexus. Moving image projections in world fairs are for this reason also directed towards the future: they often aim at displaying a local, regional, national or international history, which in turn serves to project a future for this constructed unity of nations or regions. This makes the expo a privileged point of entry for diagnosing the shared beliefs and projected plans for a society at the time it is taking place. The expo functions as a *relay* between the past and the future, and as a switchboard between existing media – photographs, dioramas, stereographs – and the emerging media: film, X-rays, the phonograph.

The expo also tells in retrospect about how that moment in time imagined and constructed its history and its future. The temporary constructions of the expo make it a point of crystallization for its time. This is why architecture is always key to these expos: they will in most cases be demolished after the end of the exhibitions, or if not, moved to other venues and contexts. What remains, however, are the media documenting the event. In the case of 1897 in Stockholm, we have access to photos, films and written descriptions. Through these archival media, one can excavate a future once imagined. Because the expo itself is an ephemeral event with a planned duration, it exists for posterity only through photos, maps, films and descriptions. Whereas other architectural projects and cityscapes most often have a history where their reception often change between periods and groups of the population – they fall in and out of favor – expos do not have such a history while the projects are still in existence. The past and future projected at this very moment is frozen in time through archival media.

I do not want to propose a naïve idea of archival media as true containers of the events they document. The image of the past produced by the expo as well as the future projected there is always updated at a later time, through changing media technologies, social and political beliefs and the rewriting of history itself. The configurations of the media documenting an event will also be subject to change, where some acquire higher forensic status (like cinema?) and others become near-obsolete (dioramas?). As mentioned, the films claimed to be screened at the Stockholm Exhibition have been re-edited by an archivist, and no one knows exactly what the program comprised. However, the world fair is a space with a very limited historical existence, which gives the historical media documenting it an accentuated role in accessing the beliefs and opinions with which the past and future of that moment were constructed.

In these projects and projections in space and time, the expo functions according to the logic of the monument. The monument serves to construct the past in order to set the agenda for the future. Like the expo, it does so primarily through the consolidation of the construct of the nation. Expos are essentially national in scope, by comparing and contrasting the constructed history and future of one nation with that of others. Architecturally, this is most often done through national pavilions, even if the Stockholm Exhibition was mainly national in scope and didn't invite other nations in the way world fairs did. To be exact, the Exhibition invited a small number of exhibitors from Norway, Denmark, Finland and Russia. By showcasing the national state of the art and industry, however, Sweden was nonetheless charting its position among other nations. Even the globalizing medium of film is appropriated within a national context, by displaying the image of the King, the life and fights of everyday life in medieval Stockholm. The films projected, even if shot under the direction of Lumière cameraman Alexandre Promio, were as mentioned the first films produced in Sweden, instigating a cinematic future of the nation.

Both monuments and expos work through the demarcation of a space as meaningful and historical. Monuments serve to separate a *place* as meaningful in contrast to the surrounding, undifferentiated *space*. This is why Michel Serres has identified the demarcation of space as the primary function of the monument, which for him marks the beginning of aesthetics.[6] Serres further traces this practice to the grave, which aims at instigating a memory of a person by inscribing a space through the tomb, the inscription on the tomb and whatever practices exist in different burial cultures. Also expos take place in a consecrated space. In Stockholm in 1897, this happened in a part of Djurgården (Tiergarten), a vast park area in the middle of the city, and formerly the royal family's hunting grounds. Within this space, it was architecturally divided between spaces of modern advances in art and industry, different thematic pavilions, and historical replicas. The half-scale model of the medieval Old Town both served as an exhibition venue, accommodating the new media of film and X-rays, and as a monument over the medieval past of the city and nation.

If monuments commemorate a past in order to project a future and install a memory of an event by remaining at the place it has installed, expos are essentially temporary and ephemeral. However, expos are often themselves commemorated through some architectural piece left standing. In Stockholm, some cafes and inns as well as a beer brewery remain at the place of the Exhibition, while more famous monuments of world fairs are the Crystal Palace in London and the Eiffel Tower in Paris. Most importantly, however, expos are commemorated by films and photographs documenting the exhibition, and sometimes also screened and displayed within the expo itself. These inscriptions become second degree monuments over ephemeral monuments: expos are already constructed with an expiry date and envisaged as constructions with near-imminent demolition. They form virtual architectures designed for a short time-frame only, often built in cheap materials as the wood and plaster of the Stockholm Old Town replica. Of course, as film scholars we all know that films and photos are ephemeral too, doubling the ephemerality of the Expo monuments they are intended to commemorate. Even when preserved, these filmic monuments change meaning over time, as every monument is subject to recurrent rewritings and shifting implications. We have long lived in a world of contested monuments, where political and social layers of monuments are the subject of struggles over preservation or demolition.

Osaka Expo '70

The remaining monuments of the Stockholm Expo today form part of a vernacular museum of Swedish culture, Skansen, designed to invent a tradition at a time of social and technological change we often call modern. Even if the exhibition was conceived to promote Swedish technical and industrial advances, the geographical and historical context for understanding the Stockholm Exhibition is mainly retrospective. In Osaka, on the other hand, the few remaining monuments from the 1970 World Expo showcase a future imagined but never realized. As mentioned, this Expo was marked by metabolist architecture, which was at its point of culmination in Japan at this time. Many of the projects of metabolist architecture were never realized, and those who were are today often already demolished or threatened by demolition. This may be in line with a Japanese aesthetics of temporality and ephemerality. The media displayed in 1970 are also to a large extent obsolete: the IMAX technique has changed, screens are mostly still rectangular instead of triangular, and the 3D technique of today relies on digital projection instead of chemical-mechanical film base. Even if many of the architectural and media technologies in Osaka showcased unrealized futures, it nonetheless formed important concepts for how we today think of the configuration between media, architecture and the city.

My interest here, however, is mainly to approach the Osaka Expo '70 as a contrast to the Stockholm Exhibition, to see how media networks as well as architecture had been reconfigured by 1970. In a fascinating article, Yuriko Furuhata develops how metabolism in architecture has been instrumental in forming a view of media as an environment.[7] Metabolists, and their most prominent architect Kenzo Tange (1913-2005), understood cities, as the name betrays, as living bodies. Soon however, Furuhata points out, Tange supplemented this model with information theory and also saw cybernetics as the model for the city. If cybernetics is the field concerned with information flows in all media, and theorize feedback and control in communication, this lead Tange to conceptualize the city as a media network. Of course, cities have been mediatized for centuries through technologies of transportation and power supplies being supplemented with systems of control (signs, surveillance, visibility). However, with electronic media of the 1960s the visible media networks of transportation gave way to the invisible networks of information. Instead of a network of visual and other media permeating the city, Metabolism understands the city as a media environment in itself. This idea has, in turn, been highly influential on current media theories of media networks as environments, enveloping our lives all the time.

The metabolist idea of the city as a media environment informs much of the Osaka Expo '70, and Furuhata analyzes one specific feature of the Expo deploying this idea. Tange's former student, Isozaki Arata, was involved in designing the Festival Plaza of the Expo '70, and understood this as a "prototype of a cybernetic environment, one that relied on computer-programmed operations of multi-media devices" deploying feedback technologies.[8] Furuhata describes the design of two robots with sensors capturing data from the Plaza environment, and sending the data back to the control room computer which would respond to the data by modulating the media environment of the Plaza. This makes an early instance of the principles of today's intelligent architecture as well as of how our environing media function. Consequently, the metabolist visions of the city as an information network structuring central designs of the Expo '70 may have helped shaping our current configurations of media as environments and cities as media.

World fairs and expos do not necessarily aim to introduce innovations that will be part of people's lives in the future. They are just as much a conceptual showcase, introducing and branding ideas about future developments. In the case of the Stockholm art and industry Exhibition, this future was firmly established on the nation's past, accommodating new technologies as cinema and X-rays within the historical replica of Stockholm, and featuring the King as a relay between the attractions. The Osaka Expo '70 also aimed to establish and showcase the national heritage, as a means of governmentality. However, the metabolist projects of the expo display a different view of media environments that has come to dominate media studies in the last decades. This view is tightly connected to a rethinking of the city as a media sphere, which in turn has come to be fully realized with portable computers and touch-glass screens a few decades later.

World fairs aim to regulate the future through technological, architectural, social and other innovations on display. In historical hindsight, these future projects lend themselves to media archaeological excavations of how technologies were discursively framed at their introduction, how some have been reconfigured and implemented in different contexts, how some have been aborted and become dead ends, and especially how they have entered into new alliances and configurations with other media. In this sense, moving image projections at world fairs function as monuments, as techniques for instigating a place for the commemoration of past events, with the aim of setting an agenda for future development.

Illustrations

38. Henri Becquerel's photographic plate of 1896.
39. Frame enlargement from *Lenin's Lamp Glows in the Peasant's Hut* (Lina Selander, 2012).

Notes

[1] My main sources of information of the two exhibitions have been: Anders Ekström, Solveig Jülich, Pelle Snickars (eds.), *1897: Mediehistorier kring Stockholmsutställningen*, SLBA, Stockholm 2006; Yuriko Furuhata, "Multimedia Environments and Security Operations; Expo '70 as a Laboratory of Governance," in *Grey Room*, no. 54, Winter 2014, pp. 56-79; Yuriko Furuhata, *Architecture as Atmospheric Media; Tange Lab and Cybernetics*, in Marc Steinberg, Alexander Zahlten (eds.), *Media Theory in Japan*, Duke University Press, Durham 2017, pp. 52-79.

[2] A reconstruction of the film program of the Stockholm exhibition can be seen here: http://www.filmarkivet.se/movies/stockholmsutstallningen-1897/, last visit 31 December 2018.
Note that this is a re-montage made by an archivist in the 1950s or 1960s, and that it doesn't represent the actual editing of the program. There is even doubt whether all of the shots seen were actually part of the program. Pelle Snickars, *Mediearkeologi: Om utställningens som mediearkiv*, in Anders Ekström, Solveig Jülich, Pelle Snickars (eds.), *1897: Mediehistorier kring Stockholmsutställningen*, cit., pp. 125-163.

[3] *Ibidem*.

[4] Solveig Jülich, *Medier som modern magi; tidiga röntgenbilder och film*, in Anders Ekström, Solveig Jülich, Pelle Snickars (eds.), *1897: Mediehistorier kring Stockholmsutställningen*, cit., pp. 229-271.

[5] Jülich charts the discourses of the harm and precauations taken in the early years of X-rays in Stockholm: *Idem*, pp. 254-257.

[6] Michel Serres, *Statues*, Flammarion, Paris 1989, pp. 163-165.

[7] Yuriko Furuhata, *Architecture as Atmospheric Media; Tange Lab and Cybernetics*, cit., pp. 52-79.

[8] *Idem*, pp. 65-67.

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Introduction: Glorious and Permanent Bazaar

Le titre du chapitre s'inspire d'un des premiers essais sur le cinéma du poète américain Vachel Lindsay (1915), où il projetait les splendeurs du nouvel art à l'aune d'une pensée renouvelée de l'architecture et de l'Exposition universelle. Ce « magnifique bazar permanent »[1] invite à interroger des lieux de circulation et de monstration des images, depuis les expositions universelles, coloniales et agricoles jusqu'aux foires d'art contemporain, en passant par les marchés indiens et africains. Le terme « bazar » est employé par Lindsay pour renverser la logique libérale du « lamentable noyau »[2] des quartiers d'affaires et pour repenser l'architecture de la ville et les relations qui s'y jouent (économiques, sociales, humaines, esthétiques). Le bazar est certes un lieu précis mais c'est aussi une idée du cinéma et des arts en général, qui se pense alors en dehors de ses modes courants de fabrication et de projection. Se construit là un autre lieu pour le cinéma mais surtout un contre-lieu, polémique, pluriel, invitant à monter l'histoire des Nations avec l'histoire du cinéma, l'histoire du cinéma avec celle des arts et des médias, et l'histoire avec la géoesthétique des formes filmiques.

L'économie de ce chapitre ne peut avoir l'ambition de proposer une histoire du bazar comme lieu d'exposition des images. Toutefois, il lance des pistes de réflexion pour interroger l'histoire du cinéma (que l'on revendique non-linéaire) à partir de ce contre-lieu inventeur et créateur de formes audiovisuelles. L'esprit du bazar a la vivacité d'un lieu de commerce des formes, de leur migration, de leur fabrication et de leur monstration. Il participe donc aux recherches sur les rapports entre architecture et cinéma, de l'espace filmé à l'espace de projection.

Le premier lieu explore la rencontre en 1915 entre l'Exposition universelle Panama Pacific de San Francisco qui célèbre la renaissance de la ville après le tremblement de terre et l'incendie de 1906 et l'invention d'un cinéma de Splendeur par Vachel Lindsay et D.W. Griffith, mettant en scène les foules, les architectures et les paysages (« 'L'Amérique à venir sous forme d'Utopie'. Vachel Lindsay, David W. Griffith et l'Exposition Internationale Panama-Pacific », Marion Polirsztok). De cette rencontre naît l'utopie de la construction d'une Amérique à la hauteur du Film de Splendeur et de l'Exposition universelle : une Amérique de paix et fraternelle, en ces temps de guerre. Ce transfert d'énergies entre un espace, les arts et leurs formes est au centre du second lieu, le bazar indien (« C'est le bazar ! », Amandine D'Azevedo). Amandine D'Azevedo y décèle des liens entre les expositions coloniales britanniques et le rôle prépondérant du bazar indien – lieu commercial vernaculaire – dans le façonnage des images indiennes, fixes comme en mouvement. Il s'agit de comprendre comment interagissent ces deux espaces d'exposition et la façon dont le bazar se positionne à la fin du 19^e^ et au 20^e^ siècles comme un lieu d'invention de formes et de création. La dynamique du bazar invite à repenser l'exposition des images en mouvement en superposant plusieurs moments de leur histoire et plusieurs lieux de leur migration. Dans un troisième espace, une « Exposition des non-alignés », Térésa Faucon se penche sur la permanence du bazar comme lieu d'échanges sur l'axe Indafrique à partir des vidéos d'Aurélien Froment

(*Non-alignés*, 2016). L'exposition de danses performées par de jeunes Sénégalais s'inspirant de Bollywood est mise en tension par le rapport figure/fond notamment dans les panoramas sur la baie et la ville de Dakar, la ségrégation entre son architecture européanisée et les anciennes zones d'esclavage. Ce non alignement propose alors un négatif des attractions des expositions coloniales et autres zoos humains.

Le bazar serait donc une pensée du cinéma que l'on suivra dans un esprit de résonnance des Amériques aux Indes, autant dans les années 1910 qu'aujourd'hui.

Notes

[1] Vachel Lindsay, *De la caverne à la pyramide. Écrits sur le cinéma, 1914-1915*, trad. de M. Chénetier, Klincskieck, Paris 2012, p. 250.

[2] *Ibidem*.

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« L'Amérique à venir sous forme d'utopie » : Vachel Lindsay, D.W. Griffith et l'Exposition Internationale Panama-Pacific (1915)

Dans le cadre de cet article, on fera se rencontrer sur le site de l'Exposition Internationale Panama-Pacific (EIPP), qui s'est tenue à San Francisco de février à décembre 1915, un poète, un cinéaste et un film. Vachel Lindsay, David Wark Griffith et *The Story of Jewel City*, réalisé sur le site de l'EIPP, partagent en ces années 1910 la conception d'un cinéma comme moyen d'expression d'une utopie,[1] celle de la construction ou de la reconstruction d'une certaine Amérique. Souvent oubliée dans la liste plus traditionnelle des médias voisinant le cinéma en ce début de 20e siècle, la « *World's Fair* » est alors perçue comme un catalyseur pour les artistes et le film considérés ici, sinon comme un moyen d'expression visuelle de cette utopie.

L'EIPP est planifiée dès le tournant des années 1900 en vue de célébrer l'achèvement des travaux du canal de Panama, ainsi que le quatre-centième anniversaire de la découverte du Pacifique par Vasco Nunez de Balboa. Retardée par le tremblement de terre et par l'incendie qui frappent San Francisco en 1906, elle célèbre également sa reconstruction et sa renaissance. Elle se tourne vers l'histoire du Pacifique (vers l'Asie et ses potentialités économiques notamment) et par là-même propose une autre histoire que celle, plus connue, de la Columbian Exposition de Chicago en 1893.

En Californie, les studios de cinéma ont été implantés autour de Los Angeles depuis le début des années 1910, déplaçant l'essentiel des tournages de la côte Est vers la côte Ouest, mais non les instances productrices et administratives de l'industrie cinématographique nord-américaine. Profitant de l'événement, la Ligue Américaine des Exploitants de Cinéma tient sa cinquième convention annuelle à San Francisco du 13 au 16 juillet 1915, une convention qui « n'a pas été chose facile à organiser […], si loin des endroits où elle s'était tenue par le passé ».[2] Au programme : conférences (notamment de Griffith, nous y reviendrons), démonstrations techniques, expositions des principales grandes compagnies de l'époque, en présence de stars (Geraldine Farrar, Fatty, Mabel), et organisation, le 15 juillet sur les lieux mêmes de l'Exposition, d'un « *Motion Picture Day* » au cours duquel « Art Smith, le célèbre aviateur, montera dans le ciel la nuit venue et écrira le mot '*movie*' en lettres de feu sur le ciel ».[3]

En outre, des compagnies comme la Selig-Hearst, la Vitagraph ou la Lubin y tournent de nombreuses actualités. Enfin, selon *Motion Picture News*, les films représentent la moitié des attractions de l'Exposition et pas moins de 25 projecteurs sont utilisés tous les jours dans les différents pavillons,[4] ce qui témoigne de l'importance du cinéma comme nouveau média. L'art moderne est exposé au pavillon des Beaux-Arts[5] et les divertissements proposés dans la « *Joy Zone* ».

Toutefois, ce n'est pas la promotion de l'industrie cinématographique, ni l'usage des images animées pour l'actualité et l'éducation qui vont m'intéresser dans cet article, mais plutôt la convergence d'une vision du cinéma et d'une vision de l'Amérique qui transitent par le lieu de l'Exposition Internationale.

L'Amérique utopique de Vachel Lindsay : du « Film de Splendeur » à l'Exposition universelle permanente, une conception au long cours de 1910 à…2018

Le « Film de Splendeur » et l'architecture

En 1915, soit la même année que l'Exposition de San Francisco, paraît un essai pionnier sur le cinéma, *The Art of the Moving Picture*, du poète, prosateur, dessinateur et marcheur américain Vachel Lindsay. Requis par le cinéma de son temps, il invente, parmi d'autres, la catégorie du « Film de Splendeur »,[6] qui met à l'honneur la féérie du cinéma et son pouvoir de transcender les foules, les nations, le sacré. Le Film de Splendeur est celui des paysages et de ces fonds qui orientent la naissance des plans larges, des panoramas, de la scène locale et nationale, des foules, de la pompe des grands événements, de la parade et du défilé, de l'ondoiement des drapeaux, enfin des formes de l'épique au cinéma. C'est, en 1915, *Cabiria*, *Judith of Bethulia*, *Marcantonio e Cleopatra*, et plus tard *Intolerance*.[7]

Lindsay place l'architecture au cœur des formes du Film de Splendeur et de son expérience du cinéma, et ce de deux façons. D'une part, la superstructure de cette catégorie de films est pour le poète l'« architecture-en-mouvement ». D'autre part, il s'agit pour Lindsay de promouvoir un état d'esprit architectural en Amérique, nourri par sa théorie du Film de Splendeur. Il propose une alliance entre le cinéma et l'architecture, le cinéaste et l'architecte : « Soulignons ici notre thèse : de tous les hommes, ce sont les architectes qui sont appelés à faire progresser le cinéma vers sa créativité la plus extrême ».[8] Il consacre ainsi un chapitre à ce qu'il appelle « La croisade des architectes » : « l'un des avenirs qui s'ouvrent devant l'Amérique, elle le doit à l'Architecte ».[9] Le cinéma se voit investi d'une mission visionnaire, celle de faire étinceler l'Amérique d'un éclat de splendeur nouvelle, à la hauteur d'un film de Splendeur ou de la faire devenir Film de Splendeur : « au fil de nombreuses années, cette Amérique, basée sur la psychologie du Film de Splendeur, naîtra peu à peu ».[10] Lindsay tisse si étroitement cinéma, Amérique et architecture, qu'il semble qu'on puisse insérer un signe d'égalité entre ces trois termes dont l'équation fonctionne dans un sens comme dans l'autre.

Comme le rappelle Marc Chénetier, et sans développer ici les ramifications idéologiques de sa pensée qu'il faudrait contextualiser dans l'histoire des idées et de la culture américaines de son temps, Lindsay était à la recherche d'un « art démocratique »,[11] « capable de définir une identité nationale »,[12] d'« aider l'Amérique à se définir elle-même et ainsi améliorer la démocratie ».[13] Il en trouve une expression dans le nouveau média du cinéma, à la suite d'autres médias qui le passionnent : « films, panneaux d'affichage, dessins, publicités, magazines, cartes postales, clichés, livres illustrés, photographies : tout cela ajouté aux éléments plus traditionnels d'expression visuelle : peintures, fresques, architecture, jardins et paysagisme, danse, spectacles historiques ».[14] A ces images et à ces signes qui envahissent l'Amérique et dont Lindsay essaye de faire les nouveaux langages d'un art démocratique, il faut ajouter l'Exposition universelle.

L'Exposition universelle

Dans l'essai de 1915, cinéma, architecture et Amérique se trouvent liés sur le lieu, quelque peu fantasmé ou mythifié par le poète, de l'Exposition Internationale (*World's Fair*). Il conçoit littéralement ces villes imaginaires, architecturées et paysagées, que sont les Expositions Internationales comme une construction, une esthétique et une utopie. Le poète entrevoit là encore les possibles du nouvel art, quoique la formule reste comme souvent quelque peu exagérée : « le cinéma peut parler la langue d'un homme dont l'esprit est à la mesure des Expositions Universelles ».[15] C'est cette mesure, cette langue et cet esprit qui vont guider l'élaboration de l'utopie du poète. Selon lui, les expositions sont des produits emblématiques de l'Amérique et il convient de les évaluer, afin que les « architectes s'attellent à transformer l'ensemble des États-Unis en une autre, permanente celle-ci, et généralisée ».[16] On voit le tressage à l'œuvre. L'Amérique peut devenir un Film de Splendeur si elle est bâtie par les architectes. Cette Amérique d'architecte peut se penser sur le modèle d'une Exposition universelle permanente :

> *Pourquoi ne pourrions-nous pas nous considérer comme une exposition Panama-Pacifique éternelle à l'échelle d'un continent ? Faisons de Chicago le pavillon des transports, de Denver celui des mines. Que Kansas City soit le pavillon de l'agriculture et Jacksonville en Floride, le pavillon horticole. Et ainsi de suite pour tous les états. De la même façon qu'au Moyen Age les hommes parcouraient des centaines de kilomètres au mépris des dangers pour se rendre aux foires permanentes des villes franches, de même les voyageurs du monde entier iront voir cette exposition, et un grand nombre d'entre eux finiront par devenir citoyens.*[17]

Lindsay conçoit l'Exposition universelle comme une rencontre possible entre l'art et la démocratie, par sa façon d'émouvoir et de mouvoir le pays (*stirred the land*) et de stimuler l'Amérique. Or c'est également ce rapport entre art et démocratie qui a provoqué l'intérêt fou de Lindsay pour le cinéma, ce nouvel art qui peut pénétrer en tout lieu, convoquer tous et toutes.

Le tressage entre architecture, Exposition universelle et Amérique comme l'utopie d'une construction déborde du seul ouvrage en prose ouvertement consacré au cinéma en 1915, même si c'est dans celui-ci qu'il se donne à lire le plus explicitement, comme galvanisé par le cinéma et ses splendeurs. Pour bien cerner la portée de cette pensée, il est nécessaire d'inscrire ces pages sur le cinéma dans un ensemble plus large des œuvres de Lindsay (poèmes, dessins, cartes, magazines, prose…) et dans une temporalité plus ouverte dont nous souhaitons faire un repérage succinct ici.

Dans les multiples travaux de Lindsay, le nouage entre esthétique et démocratie américaine remonte au moins à la fin des années 1900. On le découvre notamment dans des pièces éphémères d'avant 1912, comme ce projet de magazine à numéro unique paru en 1910, *The Village Magazine*, composé de dessins et de poèmes, ainsi que dans une série de dessins intitulée « *The Village Improvement Parade* », que l'on pourrait traduire par « la Parade du Progrès du Village » (fig. 40). Si l'on peut convoquer ces dessins et poèmes pour parler de la conception du cinéma de Lindsay, c'est que le poète lui-même nous invite à le faire. En effet, dans une lettre du 3 mai 1916 adressée au professeur en psychologie de l'Université Harvard, Hugo Münsterberg, qui vient lui-même de faire paraître un essai sur le cinéma, Lindsay joint ces dessins et précise : « les slogans sur les bannières peuvent être considérés comme formant le fondement de mon esthétique générale de 1910, avant que je n'apprenne l'existence des films. Ils expliquent également mon fol intérêt actuel pour les films ».[18] Certes, ces propos sont à mettre en relation avec une période de grand enthousiasme pour le cinéma et pour le livre de Münsterberg, mais il n'en demeure pas moins que Lindsay instaure une continuité dans sa pensée et son travail, en associant cette esthétique de 1910 à sa conception du cinéma. Est-ce à dire que le cinéma est une « *Village Improvement Parade* » ? Autrement dit, peut-être déjà un Film de Splendeur, déjà une Exposition Internationale ?

Sur ces dessins, réalisés dans un style naïf, on voit un défilé de personnes (les deux pieds sur la même ligne comme dans les représentations de l'Égypte antique qui importent tant au poète) portant de grandes bannières ornementées et sur lesquelles sont écrits les fameux slogans. Autour d'eux, de nombreux arbres fleuris, un jardin, le pays. Il n'est pas le lieu ici de commenter tous les slogans, qu'il faudrait en outre remettre dans le contexte social et politique qui est le leur. Certains nous concernent directement : « Nos meilleures images devraient être de la belle peinture, nos meilleurs monuments devraient être de la vraie sculpture, nos meilleurs bâtiments devraient être de l'architecture véritable », ou encore : « la laideur est une sorte de mauvais gouvernement » (fig. 41). On y trouve déjà la peinture, la sculpture et l'architecture qui seront trois modèles de pensée du cinéma pour Lindsay en 1915. On y retient surtout l'idée de parade citoyenne, cette procession (*pageant*) qui est à la fois celle de l'Exposition Internationale et du Film de Splendeur. Lindsay travaille à une transformation de la cité lorsqu'un « magnifique bazar permanent »[19] viendra remplacer les centres d'affaires. Il se rattache à une certaine conception de l'architecture, de l'Amérique comme paysage, jardin et parc,[20] et aussi comme l'expression directe de la démocratie.

C'est donc plus généralement que Lindsay place l'Exposition Internationale au rang des expressions de son utopie. Dans une lettre plus tardive (9 février 1927) à la poétesse et directrice de la revue *Poetry*, Harriet Monroe, elle-même auteure d'un poème écrit pour l'Exposition de 1893, *Columbian Ode*, Lindsay exprime les capacités de l'Exposition Internationale à catalyser les forces créatrices :

> *J'ai la conviction profonde que Poetry, A Magazine of Verse est le meilleur, le plus digne, et le plus éternel enfant de cette Exposition Internationale et qu'il représente un transfert des énergies hâtives de l'architecture, de la sculpture, de la peinture et du jardin paysager de cette époque dans un domaine entièrement différent.*[21]

Si, dans cette lettre, le domaine en question est la poésie, il pourrait tout aussi bien être le cinéma, enfant de l'Exposition Internationale, qui est à son tour vue comme un lieu de circulation et de transfert des énergies des arts et des médias qui trouvent à s'y exprimer.

Ces transferts d'énergie de l'Exposition Internationale, Lindsay les saisit une fois encore pour construire une autre utopie, annoncée dans les poèmes, proses, cartes et dessins des années 1910 : *The Golden Book of Springfield*. Paru en 1920, ce texte se présente comme le compte rendu d'un livre à paraître à l'automne de l'année 2018, dans lequel le poète imagine comment s'invente en l'an 2018 un nouveau Springfield sur le modèle de l'Exposition Internationale.

La Californie

Cette conception proprement utopique de l'Amérique conduit Lindsay à établir plus spécifiquement, et quasi prophétiquement, à l'orée de l'extension d'Hollywood, un lien fort entre la Californie et le cinéma.[22] Lindsay prend acte d'un déplacement, d'un nouveau débarquement dit-il, du centre de développement des États-Unis de la côte Est vers la côte Ouest, y compris dans sa dimension économique et son cortège de superficialité et de médiocrité.

La Californie découvre avec le cinéma une opportunité pour « trouver […] une expression qui lui soit propre ».[23] Pour le poète, « tous deux ont le génie des jardins, de la danse et du carnaval », soit le génie du pays, des paysages et des panoramiques, de la procession et du défilé, le *pageant*. Autrement dit, la Californie possède les attributs d'un film de Splendeur, « car le nom même de Californie dit la Splendeur ».[24] L'Exposition Internationale Panama-Pacifique ne vient-elle pas accomplir cette rencontre du cinéma et de la Californie ?

L'importance de l'Exposition pour Lindsay n'est pas seulement nationale, la Californie prenant place dans la nouvelle cartographie utopique dessinée par le poète, à l'instar de chaque État devenu une Exposition permanente. Elle est véritablement internationale. En témoignent les dessins et le poème *The Wedding of the Rose and the Lotus*, réalisés pour l'achèvement du percement du canal de Panama et qui célèbrent, comme le titre l'indique, la rencontre de l'Est et de l'Ouest (fig. 42). Dans une lettre à Hamelin Garland du 31 mars 1913, Lindsay explique que ces fleurs sont un signe de courtoisie, de paix et de justice envers l'Asie. Il établit un lien explicite avec l'Exposition de San Francisco alors en préparation, où il imagine que la juxtaposition des deux fleurs « pourrait aisément prendre un sens rituel en cette année d'Exposition Internationale ».[25] Lindsay n'échappe peut-être pas à une forme d'exotisme et d'attrait pour l'Orient, tout comme l'exotisme mis en scène dans les expositions relève d'enjeux troubles, affirmant souvent l'impérialisme occidental. Néanmoins, il fait de ces deux fleurs un symbole de fraternité indissociable de sa conception de l'Exposition Internationale, et du cinéma, où souvent le monde se rencontre et fraternise.

Quelle conception du cinéma découle de ce paradigme de l'Exposition universelle ? Il ne s'agit pas d'une technique, d'une industrie ou d'un commerce. Il ne s'agit pas non plus d'une science, ni d'un divertissement. Il s'agit sans aucun doute d'une esthétique et de visions diverses de l'Amérique. Lindsay arrache le cinéma des nécessités qui sont déjà les siennes en 1915, pour l'inventer ou le prophétiser en d'autres lieux que sont l'Exposition, comme nous l'avons vu, et également le musée, la bibliothèque[26] ou l'Égypte. Le nouvel art est ainsi emblématique, avec l'architecture et l'Exposition Internationale, d'un nouveau cycle de l'histoire où prend place l'Amérique.

De l'utopie à la création cinématographique, l'écart n'est pas si grand et Lindsay identifia très rapidement le *Intolerance* réalisé par D. W. Griffith comme un sommet du cinéma américain. Or Griffith en 1915 est un plein processus créatif de son grand Film de Splendeur.

David W. Griffith, un homme dont l'esprit est à la mesure des Expositions universelles ?

Griffith fait une expérience esthétique saisissante de l'Exposition Internationale de San Francisco. Dans ses mémoires, Karl Brown, alors assistant du chef opérateur Billy Bitzer, raconte les années de travail de l'équipe de Griffith entre 1914 et 1915 qui conduisent à la finalisation du projet d'*Intolerance*. En 1914, en sortant d'une visite à la prison de San Quentin pour les besoins du tournage de *The Mother and the Law*, Griffith, Bitzer et Brown découvrent un spectacle sidérant :

> *Sur le chemin du retour vers San Francisco, nous fîmes une pause sur une grande route surplombant la nouvelle Exposition de San Francisco, et nous nous arrêtâmes pour tourner différents angles de la large étendue des bâtiments fantaisistes et somptueux qui devaient être ouverts au public l'année suivante, en 1915. La « Jewel Tower » était particulièrement impressionnante, et Bitzer en prit un certain nombre de plans d'ensemble, la plupart cadrés de façon à n'impressionner que le coin supérieur du cadre. Ces plans ne devaient pas être développés, mais mis de côté pour la future fin d'un film à venir. Car Griffith aimait finir ses films avec les visions de deux amoureux rêvant à des châteaux dans le ciel, et cela appelait à la surimpression dans l'appareil.*[27]

Cette anecdote amène les commentateurs à remarquer, à juste titre, les liens profonds entre la conception et la construction des décors d'*Intolerance*, et l'Exposition. Tous deux sont faits à partir des mêmes matériaux et proposent des expériences similaires.[28] Mais plus que les échos évidents entre la *Jewel Tower* et les tours de Babylone, ce qui retient l'attention dans ce témoignage c'est la façon de cadrer les images, en réservant le centre du plan pour caler les vues de l'Exposition sur le bord supérieur. Brown reconnaît immédiatement dans ce type de plans une fin caractéristique d'un film de Griffith (plans d'ensemble, cadrés sur le bord supérieur des décors en construction et relativement spectaculaires, évoquant quelques bâtiments passés, présents et futurs). Davantage qu'aux tours babyloniennes, c'est bien à la fin d'*Intolerance* que nous pensons : ce plan fugace de deux villes étagées, bombardées, n'est-il pas réalisé avec les vues mentionnées par Brown ? (fig. 43) Dans cet épilogue symbolique, Griffith déploie une utopie de la pastorale américaine en multipliant les fondus et les surimpressions et en rassemblant les foules et les messages de paix sur des intertitres comme autant de slogans. Ne crée-t-il pas là une sorte de *pageant* et de « *Village Parade Improvement* » ?

Ainsi l'Exposition universelle n'est pas seulement un espace où montrer l'image animée, mais aussi un lieu où s'inventent et circulent les splendeurs d'un certain cinéma américain, un lieu de transfert d'énergies selon la formule de Lindsay : « de grandes cités nées de grands films architecturaux ou de grands films nés des grandes cités ».[29] Lindsay et Griffith partagent une conception du cinéma et de l'Exposition Internationale comme expression d'une utopie, celle d'une certaine Amérique démocratique dont il faudrait ailleurs cerner les enjeux idéologiques en cette année troublée.

Un an plus tard, en juillet 1915, Griffith est présent à San Francisco lors de la convention des exploitants de cinéma. Il prononce une conférence, « The Rise and Fall of Free Speech and Personal Liberty in America » (« Grandeur et décadence de la liberté d'expression et des libertés individuelles en Amérique »). Si nous ne connaissons pas pour l'heure le contenu exact de cette conférence, nous disposons néanmoins du pamphlet que Griffith fait imprimer à Los Angeles quelque temps plus tard (en 1916) en libre usage.[30] Le sujet de la conférence et du pamphlet se situe dans un moment charnière du travail de Griffith. Ils peuvent en effet être vus à la fois comme un *addendum* à *The Birth of a Nation* et aux polémiques déclenchées par ce film, et comme une version écrite du film à venir et en cours d'élaboration, *Intolerance*. C'est un texte de défense et de légitimation du cinéma dans lequel Griffith exprime une grande ambition pour son art qu'il compare à la presse et qu'il nomme l'université du travailleur. Griffith semble également partager avec Lindsay une vision démocratique de l'art du cinéma, même si son rapport à la réforme de la *Progressive Era* est ambivalent, puisque c'est elle qu'il tient responsable de la censure du cinéma et de la privation de liberté d'expression. Le poète et le cinéaste ont également en commun l'ambition d'un film d'idée, voire de propagande, dirait le premier. Griffith et Lindsay participent tous deux à l'écriture d'un certain récit national, à un moment clé de l'histoire des États-Unis. Toutefois le village-parade-exposition qu'ils imaginent est une utopie de paix et de fraternité, comme la rose et le lotus du poète, et non pas de guerre. Lindsay conçoit son Amérique-Film de Splendeur-Exposition Internationale comme l'opposé de la guerre : « il nous faut quelque chose d'aussi spectaculaire, au plan international, mais qui vise, à l'inverse, à se concilier le monde et à se faire des amis ».[31]

Loin de la Joy Zone, un cinéma symbolique : The Story of Jewel City*, Will Nigh, 1915*

Un film court a été tourné en 1915 sur les lieux mêmes de l'Exposition Panama Pacific, *The Story of Jewel City*, réalisé par Will Nigh.[32] Les informations sur ce film sont rares, nous ne savons pas dans quelles circonstances il a été diffusé et devant quels spectateurs. On trouve les précisions suivantes dans cet extrait d'un article de *Motion Picture News* du 7 avril 1915 :

> *La société Groumann, au capital de 500 000 dollars, a les droits exclusifs pour réaliser des films dans l'enceinte de l'exposition. Une compagnie dirigée par Jesse Dandy, la star originale du Prince de Pilsen, et qui a récemment rejoint les acteurs de la Keystone, a été mise sur pied. Elle sera dirigée par Will Nigh, qui était auparavant avec la California Motion Picture Company. Seront réalisées des comédies utilisant le cadre de l'exposition comme arrière-plan, y compris des scènes des grands événements ou des scènes écrites autour de la venue d'éminents visiteurs. La World Film Corporation a signé un contrat pour l'exclusivité des droits sur tous ces films et en sortira un par semaine.*[33]

Il est possible que *The Story of Jewel City* fasse partie de cette série de films de la société Groumann. Le carton restant qui ouvre le film mentionne les éléments suivants : « *Official Opening of Panama Pacific International Exposition. Portals of the Past and Portals of the Present, presented by Exposition Players Corporation, Official Cinematographer* ». De plus, Will Nigh est crédité dans le carton suivant (histoire et la direction), avec un certain W. L. Griffin à la caméra, et les jeunes Kathlyn Dempsey et Catherine Lund dans les rôles de la Fée des Portes et de la Fée Petit Soldat.

La copie qui nous est parvenue fait environ 9 minutes et est manifestement incomplète. Le titre s'inspire bien évidemment de la tour principale de l'Exposition, *The Jewel Tower*. On remarque toutefois que la ville est substituée à la tour : il s'agit bien de la cité. Le film est une mise en scène symbolique, voire allégorique, de la renaissance de San Francisco qui adresse ses remerciements officiels aux cités amies. A travers les portes du passé (des ruines et du feu) s'avance une fée. Parmi les temples, les colonnades, les bassins et les jardins de l'Exposition, elle déambule et concocte une potion magique (à base de la fleur symbole de la Californie, l'or du coquelicot, et de rose) qu'elle disperse sur la ville pour lui donner l'inspiration. Elle danse dans les décors majestueux et vides et vole au-dessus des pavillons ; c'est l'occasion de présenter un panoramique de l'Exposition, avec la fée en surimpression (fig. 44). Puis le décor change et montre les ruines d'un pays malheureux, en guerre, dans lesquelles erre un Petit Soldat, qui passe de cadavre en cadavre pour exprimer sa désolation. Les uniformes représentent manifestement diverses nations et le Petit Soldat entreprend de nouer les mains des corps étendus, afin que les hommes fraternisent à nouveau. En montage alterné, la fée lance la colombe de la paix au Petit Soldat qui s'envole pour la rejoindre. Les portes du présent s'ouvrent, comme l'annonce un carton, et les citoyens du monde entier entrent. Un dernier carton affiche le mot « Paix ».

The Story of Jewel City est par bien des aspects une sorte de film officiel pour une Amérique qui n'est pas encore entrée en guerre et qui revendique sa neutralité, voire son rôle de faiseur de paix. Il situe ainsi résolument le cinéma hors de la « *Joy Zone* », celle des amusements et des attractions, où l'on trouve entre autres un *Aeroscope*,[34] des panoramas, des curiosités naturelles, des expositions ethniques (et exotiques), des danses, des cirques, des reconstitutions historiques (*pageant*). Le film ne montre rien de tout cela et n'y participe pas, même si par certains aspects il s'y rattache (panoramas, *historical pageant*, danses). Il est, pour reprendre la catégorie de Lindsay, un Film de Splendeur Féérique, dont l'architecture et les jardins ont tout le sérieux et le spectaculaire imposant des pavillons de l'Exposition IPP. Outre sa féérie, qui passe par les nombreuses surimpressions et autres envols, ce film s'inscrit dans un registre symbolique, voire allégorique, extrêmement courant dans ces années du cinéma muet américain (qu'on pense à *Home Sweet Home* [1914] de Griffith ou *Hypocrites* [1915] de Lois Weber). En mettant en scène passé, présent et futur, et par son symbolisme de la paix sans doute naïf, il prend en charge des questions similaires à celles que posent d'une part Lindsay dans sa recherche d'un art démocratique et d'une Amérique nouvelle qui adviendrait par le cinéma, et, d'autre part, celles posées par Griffith dans sa vision de l'histoire et de la place de l'Amérique telle qu'elle s'exprimera dans *Intolerance*. Sur certains points, *The Story of Jewel City* rappelle l'épilogue de ce film, encore à venir rappelons-le. Il est donc à la fois étonnant et peu surprenant d'y trouver, pour ainsi dire, les plans tournés par Billy Bitzer au bord de la route qui surplombe la baie de San Francisco ! En effet, à un moment donné dans *The Story of Jewel City*, alors que la fée ramasse des fleurs dans un sous-bois, une vue de l'Exposition apparaît par le truchement d'une double exposition sur le bord supérieur du cadre, occupant le ciel par sa blancheur, tandis que le bas du cadre reste plus sombre (fig. 45). Sans clairement identifier l'idée suscitée ici (une cité céleste, une métamorphose du monde ?), on sait qu'il s'agit d'abord de mettre en œuvre une idée et donc un pouvoir du cinéma. On perçoit dans ce goût pour les surimpressions féériques et symboliques et dans cet agencement de ville et de paysage, un résumé de cette utopie américaine dont nous avons suivi les traces dans un glorieux bazar de poèmes, de prose, de dessins, d'architecture et de film.

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Abigail Markwyn, *Empress San Francisco. The Pacific Rim, the Great West and California at the Panama-Pacific International Exposition*, University of Nebraska Press, Lincoln 2014.

Illustrations

40. Vachel Lindsay, « *The Village Parade Improvement* », section 1.
41. Vachel Lindsay, « *The Village Parade Improvement* », section 5.
42. Vachel Lindsay, *The Wedding of the Rose and the Lotus* (extrait).
43. *Intolerance*, D. W. Griffith, 1916.
44. *The Story of Jewel City*, W. Nigh, 1915.
45. *The Story of Jewel City*, W. Nigh, 1915.

Notes

[1] « Plus d'un travailleur s'imagine l'Amérique à venir sous forme d'Utopie », Vachel Lindsay, *De la caverne à la pyramide. Ecrits sur le cinéma, 1914-1925* (*The Art of the Moving Picture*, The MacMillan Company, New York 1922), Klincksieck, Paris 2012, p. 247. Cet essai a paru pour la première fois en 1915, et a été revu et republié en 1922. Toutes nos citations proviennent de la traduction française de la version de 1922 par Marc Chénetier.

[2] « Fifth League convention will surpass all previous film events » (7 juillet 1915), in *Motion*

Picture News, vol. 12, n° 2, 17 juillet 1915, p. 53. Je traduis toutes les citations en anglais sauf mention contraire.

[3] Programme de la cinquième convention de la Motion Picture Exhibitor's League of America and Exposition of Motion Picture Arts, Supplément à *Motion Picture News*, vol. 12, n° 2, 17 juillet 1915, non paginé.

[4] Le cinéma est quasiment absent du livre d'Abigail Markwyn mais elle précise tout de même que « de nombreux exploitants présentaient des 'images animées' dans leurs expositions, et elles devinrent suffisamment attractives pour que, après quelques mois, le programme officiel, publié chaque jour de la foire, inclue une longue liste des heures et des lieux où les visiteurs pouvaient voir les films ». (Abigail Markwyn, *Empress San Francisco. The Pacific Rim, the Great West and California at the Panama-Pacific International Exposition*, University of Nebraska Press, Lincoln 2014, p. 32). Il s'agit de films didactiques sur l'immigration, l'hygiène, l'éducation, etc.

[5] L'exposition tout entière est une expérience artistique, avec plus de 20 000 œuvres disséminées partout. Sur cette question, voir James A. Ganz (sous la direction de), *Jewel City : Art from San Francisco's Panama-Pacific International Exhibition*, University of California Press, Oakland 2015.

[6] « *Picture of Splendor* », que nous utiliserons dorénavant sans guillemet.

[7] Respectivement de G. Pastrone (1914), D.W. Griffith (1913), E. Guazzoni (1913), D.W. Griffith (1916).

[8] Vachel Lindsay, *De la caverne à la pyramide*, cit., p. 165.

[9] *Idem*, p. 247.

[10] *Idem*, p. 248.

[11] M. Chénetier (sous la direction de), *Letters of Vachel Lindsay*, Burt Franklin & Co, New York 1979, p. xxvii.

[12] *Ibidem*.

[13] *Ibidem*.

[14] *Ibidem*.

[15] Vachel Lindsay, *De la caverne à la pyramide*, cit., p. 248.

[16] *Ibidem*.

[17] *Idem*, p. 249.

[18] Lettre de Vachel Lindsay à Hugo Münsterberg, datée du 3 mai 1916, https://ark.digitalcommonwealth.org/ark:/50959/73667h60n, dernier accès 20 juillet 2018. L'ensemble des dessins communiqués au professeur Münsterberg est consultable à cette adresse : https://ark.digitalcommonwealth.org/ark:/50959/73667h651, dernier accès 20 juillet 2018.

[19] Vachel Lindsay, *De la caverne à la pyramide*, cit., p. 250.

[20] On pense aux travaux de Lewis Mumford, que l'on pourrait rapprocher de la pensée de Lindsay. Après tout, Mumford ne mentionne-t-il pas le poète à plusieurs reprises dans ses essais ? (L. Mumford, *The Story of Utopias*, Boni and Liveright, New York 1922 ; L. Mumford, *The Golden Day, A Study in American Experience and Culture*, Liveright, New York 1926).

[21] Lettre à Harriet Monroe du 9 février 1927, in M. Chénetier (sous la direction de), *Letters of Vachel Lindsay*, cit., pp. 381-382. Au contraire, en 1915 dans un court texte justement publié dans *Poetry*, la poétesse Eunice Tietjens regrettait le peu d'importance accordée à la poésie par l'Exposition Panama-Pacific. Selon elle, alors que l'Exposition avait l'opportunité de faire entendre le cri des artistes européens face à la guerre, elle a manqué sa chance de donner à la poésie la place qu'elle mérite, quand bien même des vers de Walt Whitman et de Confucius (l'ouest et l'est !) seraient gravés sur certains monuments du site. La question est posée de la place de la poésie dans les progrès culturels de la nation et dans cet espace de l'Exposition, dédié au commerce (E. Tietjens, « Poetry and the Panama-Pacific Exposition », dans *Poetry*, vol. 6, n° 5, août 1915, pp. 264-266).

[22] Dès l'édition de son essai sur le cinéma de 1915, il consacre un chapitre à la Californie et l'Amérique, qu'il reprend dans la préface d'un recueil de poèmes intitulé *The Golden Whales of California, and Other Rhymes in the American Language* (The MacMillan Company, New York 1920).

[23] *Idem*, p. 227.

[24] *Idem*, p. 230.

[25] Lettre de V. Lindsay à H. Garland, 31 mars 1913, dans M. Chénetier (sous la direction de), *Letters of Vachel Lindsay*, cit., p. 67.

[26] Voir à ce sujet Peter Decherney, *Hollywood and the Culture Elite : How the Movies Became American*, Columbia University Press, New York 2005.

[27] K. Brown, *Adventures with Griffith*, Secker & Warburg, London 1973, p. 120.

[28] Scott Simmon identifie dans cette anecdote un effet de montage et de contraste qui préside à la réalisation d'*Intolerance*, et y voit une possibilité supplémentaire pour le cinéaste d'accorder une attention à la monumentalité du décor et à sa valeur en soi. En outre, souligne Miriam Hansen, le film et l'Exposition proposent une architecture à parcourir : « les travellings invitent le spectateur à s'émerveiller des monuments exposés, comme un visiteur à une exposition universelle ou sur un site archéologique ». Les décors en construction dans la presse de l'époque sont qualifiés de « mammoth sets », et Griffith fait remarquer dans un entretien de 1916 qu'ils sont faits de staff, le même matériau utilisé pour l'Exposition de San Francisco. Les photographies des décors en construction et en destruction ne sont pas sans rappeler celles de la construction et du démontage de l'Exposition IPP.

[29] Vachel Lindsay, *De la caverne à la pyramide*, cit., p. 58.

[30] D. W. Griffith, *The Rise and Fall of Free Speech in America*, Los Angeles 1916.

[31] Vachel Lindsay, *De la caverne à la pyramide*, cit., p. 248.

[32] Une copie de ce film est visible sur Internet Archive : https://archive.org/details/StoryofJ1915, dernier accès 20 juillet 2018.

[33] « Films Make Half the Attractions of World's Fair », dans *Motion Picture News*, vol. 11, n° 15, 7 avril 1915, p. 65.

[34] Sur ce sujet voir Patrick Ellis, « 'Panoramic whew' : the Aeroscope at the Panama-Pacific International Exposition, 1915 », dans *Early Popular Visual Culture*, vol. 13, n° 3, 2015, pp. 209-231.

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C'est le bazar ! Une autre histoire d'exposition des images indiennes et anglaises

Cet article explore un lieu où se fabriquent, s'échangent et s'exposent des images, et où se croisent en retour des imageries venues du monde entier. Ce lieu est le bazar. Présent dans les villes du Proche-Orient et d'Asie, le bazar est un espace complexe, souvent étudié sous l'angle de l'analyse économique ou pour son influence sur le champ politique. Avant tout lié à des enjeux économiques, le bazar est caractérisé par son système financier, établissant son propre taux de prêt ou fixant les prix des denrées qu'il abrite. Comme le remarque l'historien C. A. Bayly,[1] le bazar indien par exemple s'est positionné au temps de la colonisation comme un système parallèle au système bancaire de l'Empire,[2] notamment vis-à-vis de la monnaie papier dont use ce dernier. Fonctionnant sur le système de billets à ordre et selon d'autres structures de crédit (*hundis*), le bazar existe sur le territoire indien *à côté* des injonctions britanniques dans la sphère commerciale. Cette superposition entre plusieurs systèmes, qui peuvent être perçus comme concurrentiels, fait du bazar un lieu aux multiples identités. Dans le cas de l'Inde, il est par ailleurs lié à des enjeux politiques forts, lors des luttes pour l'indépendance du pays notamment ; l'historien Anand A. Yang a ainsi travaillé sur le rôle et l'importance du bazar dans les rumeurs et la circulation de *flyers* politiques.[3] Là aussi, le bazar devient un contre-lieu du pouvoir colonial, un espace de définition (économique, politique) qui coexiste avec le pouvoir en place.

C'est par ailleurs un espace dont les caractéristiques architecturales ont des conséquences sur l'appréciation des objets qui y transitent et qui en sortent : un emplacement précis d'une ville, assez clos, avec un réseau de ruelles et un dédale d'échoppes souvent à ciel ouvert ou sous un système de dais. On entre et on sort d'un bazar, ce dernier formant une sorte d'interface. L'un des paradoxes du bazar est de signifier aujourd'hui dans le langage courant un espace désorganisé et brouillon, là où il relève au contraire d'une organisation extrêmement précise : les boutiques d'une même ruelle vendent la même chose, tout comme les prix sont alignés et débattus en commun par les marchands. Allée des graines, ruelle avec les parfums, celle d'à côté vendant des bijoux, une autre les légumes ou les objets du culte, chaque espace a une fonction. Il faut aussi tout de suite remarquer que le bazar abrite ou se trouve à proximité des lieux de culte. Le bazar mêle religion, politique et art. D'une grande complexité, il devient, dans les écrits des Britanniques en poste notamment, un espace incompréhensible, insaisissable, voire repoussant et les descriptions insistent souvent sur son côté impraticable et « indigène » :

> *A l'est de la ville de Kabob se trouvent les habitations dédiées à la population locale, des constructions en terre se font face en grimaçant autour des ruelles sales et étroites qui les séparent, le tout formant des artères qui se croisent, se scindent et dissèquent le Grand Bazar de Kabob. Les habitations, dans la majeure partie de leur apparence, combinent l'attrait des monticules de terre avec les caractéristiques de la porcherie.*[4]

Le côté sinueux et labyrinthique a ainsi un fort impact sur la façon dont les « étrangers » perçoivent le bazar :

se perdre, ne reconnaitre aucune direction, tomber sur quelque chose d'inattendu. Dès lors, les objets que le bazar abrite sont eux aussi auréolés de ce même inquiétant mystère. Et, lorsqu'il n'est pas repoussant, le bazar est chargé d'exotisme, comme ne cesse de le souligner les illustrations, les romans et les films l'utilisant comme décor ; montreur de serpent, traquenard et impasses dangereuses, le bazar est tout sauf un simple lieu de commerce. C'est ce que relève Kajri Jain, spécialiste des lithographies populaires, qui pose que le bazar provoque : « le frisson d'une immersion chaotique dans l'exotique : une attente construite par les descriptions orientalistes du 'quartier indigène', des bulletins de Rudyard Kipling ou de Lovat Fraser aux films de Hollywood comme *Indiana Jones et le Temple maudit* ou *Octopussy* ».[5] Dès lors il faut prendre garde à l'orientalisme que le simple mot de bazar transporte avec lui, associé très souvent à des villes précises, elles-mêmes fortement perçues comme exotiques : Kashghar, Ispahan, Ghazvi, Istanbul…

L'art de bazar

Dans le cadre de cet article, c'est moins l'angle économique qui sera central que le rôle créatif du bazar dans la circulation d'objets et d'images. En Inde, il est un lieu d'exposition de l'art populaire mais aussi des objets techniques venus d'Occident. Peinture à l'huile, photographie et cinéma ne rentrent ni ne sortent indemnes du bazar, puisque des entrepreneurs locaux s'en emparent, métissent des savoir-faire et introduisent des ruptures dans les imageries (sujets mythologiques, décors). Le bazar est un lieu de l'entre-deux mondes, Occident et Inde mêlés, où la culture coloniale croise la culture vernaculaire, produisant des objets hybrides. Cette multitude de sens du mot bazar, des différentes strates et couches d'imaginaire venant se superposer ont eu tendance à minimiser la puissance des propositions, notamment esthétiques et artistiques, qui en découlent. L'art de bazar, hors quelques livres d'images et les travaux universitaires de Kajri Jain et Christopher Pinney, est demeuré un courant artistique peu déplié bien que fondamental pour l'étude du champ visuel indien. À Calcutta notamment, capitale de l'Empire britannique jusqu'en 1911, le bazar absorbe les objets venus d'Occident et les transforme, creuset où se rencontrent les techniques et les formes. Là se construit, se fabrique, circule et s'expose une certaine imagerie indienne, très liée à la dévotion et aux représentations divines, mais indétachable d'une influence naturaliste occidentale (perspective, volume, clair-obscur). Cette esthétique singulière est partagée entre des images fixes (calendriers, publicités, icônes) et des images en mouvement (bioscope, lanterne magique et cinéma) bien qu'il ne faudrait pas distinguer les deux car l'Inde construit un champ visuel commun et partagé, rendant impossible la séparation.[6] Cette imagerie transversale reprend des thèmes indiens (mythologie, contes, héros historiques de l'indépendance) pour leur appliquer des techniques venues d'ailleurs (imprimerie, collage, peinture à l'huile, photographie et cinéma). Telle représentation des dieux Ram et Sita peut ainsi être tout autant une lithographie décorative, une image posée sur un autel à laquelle on rend un culte ou l'illustration d'un paquet de biscuit.[7] Ce trouble statut des images existe aussi pour la lanterne magique et le cinéma, puisque les spectacles et les films mythologiques notamment sont simultanément des divertissements, des inventions techniques étrangères, mais participent aussi des foires religieuses. Il est ainsi inscrit sur les plaques de lanterne magique de la famille Patwardhan une adresse dévotionnelle à un saint, et elles ont sans nul doute survécu car elles ont une valeur religieuse, tout comme les séances de cinéma connaissent jets de piécettes et de fleurs lors des apparitions divines ; de nombreux postes de télévision ont, eux-aussi, été ornementés de fleurs lors de la diffusion de séries mythologiques, sur lesquels nous reviendrons. Or, le nœud de ces différents aspects est le bazar, qui fait tenir ensemble la culture populaire traditionnelle et l'émergence d'une culture urbaine fortement associée à la colonisation, le tout mâtiné tant de dévotion que de politique.

Kajri Jain, dans son ouvrage *Gods in the Bazaar*, reprend une double appellation : elle emploie indistinctement les termes de *bazaar art* et de *calendar art.* En effet, la forme d'art la plus évidemment liée au bazar est celle des calendriers que les boutiquiers offrent à leurs clients pour le nouvel an hindou (*diwali*). Ils mettent en scène le plus souvent des divinités, bien que pas exclusivement. Objets du quotidien, utilitaires, partout exposés dans les boutiques, ils connaissent une intense circulation au sein du bazar qui est l'épicentre d'une forme culturelle de masse que Kajri Jain pose comme étant une opposition à ce que l'Angleterre victorienne définit comme les beaux-arts.[8] Mais il ne faut pas trop vite comprendre l'art de bazar comme uniquement une forme commerciale émergeant *face* à ces derniers. Comme le dit Jain : « 'bazaar' art ne signifie pas la même chose qu'art 'commercial' : le mot hindoustani 'bazaar' situe cette forme dans le champ du vernaculaire et du non-anglophone ».[9] En effet, venu du persan – « marché », « circulation » –, le terme bazar est moins un indice de la *nature* des œuvres (médium, usage commercial, pratique ou artistique) que du *lieu* d'où elles sortent. Ainsi, l'importance associée au vernaculaire, notamment en période de colonisation, est à lier à un aspect évoqué plus haut, soit le bazar comme un lieu imprenable pour celui qui n'y est pas habitué. Bien que n'étant que l'un des supports de cet art, le calendrier est d'abord perçu comme le symbole d'un échange annuel entre les commerçants du bazar et leurs clients, mais il peut rapidement devenir le support d'une réflexion plus vaste, tant sa « forme moderne et commerciale d'imagerie religieuse et mythologique est devenue les fondements d'une fabrication et d'une reconfiguration de différentes formes d'identités, notamment nationale ».[10] Cet art se place, depuis le 19e siècle, sur un ensemble de frontières : religieux-séculaire, produit-art, local-panindien. Et il a aussi pour caractéristique d'avoir attiré à lui, et d'avoir fondu dans son imagerie, tout un ensemble de techniques venues de l'académisme occidental : perspective, volume, clair-obscur. Le système d'absorption que le bazar produit pour les images fixes sera tout à fait semblable à ce que l'on observe pour d'autres arts, de la toile peinte au bioscope, de la lanterne magique au cinéma. L'art de bazar, souvent caractérisé par les fameux calendriers, comporte aussi des posters, des images encadrées, des porte-clefs ; par extension les images de comics, les illustrations de livres populaires, les publicités dessinées, les emballages, et je propose de pousser cette définition jusqu'à deux séries mythologiques télévisuelles.

En effet, à la fin des années 1980, *Ramayan*[11] et *Mahabharat*[12] sont célèbres pour avoir littéralement vidées les rues les dimanches à l'heure de leur diffusion. Les vendeurs et les clients des bazars cessaient tout commerce pour regarder en commun l'épisode.[13] Ces séries reprennent les grandes lignes des deux grandes épopées de la culture indienne, et leur étalement dans le temps a produit une considérable influence sur la société indienne et sur la façon de représenter la mythologie. Courant des mois entiers sur des millions de postes de télévision, elles ont façonné une imagerie mythologique singulière ; moralisatrices, ces séries ont aussi eu un fort impact politique. Le critique Chidananda Das Gupta, lui, y voit l'influence néfaste des modes de représentation à l'occidentale, déjà perçue en peinture : « *Sur de nombreux points le* Ramayan *de Sagar est non indien. Sa culture visuelle dérive des modèles occidentaux importés dans le pays par Raja Ravi Varma* [peintre naturaliste de la fin du 19e siècle]. […] *Les formes abâtardies des productions modernes deviennent incongrues et bizarres à cause de l'intrusion d'un naturalisme dénué de tout rapport* ».[14] Pour Das Gupta, les séries ne s'appuient pas sur les traditions indiennes pour représenter les personnages et les décors, mais sur une imagerie étrangère. La série télévisée devient une forme hybride peu attirante, une importation étrangère éloignant les récits mythiques de leurs formes usuelles. Or, cette « abâtardisation » ne me semble pas le fait d'une quelconque « modernité », ni même d'une occidentalisation, mais rejoint précisément tout un système de transformation propre à n'importe quelle image indienne et, *a fortiori*, une image trouvant sa place dans le bazar. La télévision, mise en contact d'images disparates venues de partout, est un bazar dans le bazar ! Dès lors, il faut accepter que la nature des images ne saurait être que l'un des critères pour définir et analyser les objets et les imageries indiennes, au côté d'une plus grande attention à la façon dont elles circulent.

Changer la nature des images

Le grand peintre que cite Das Gupta, Raja Ravi Varma (1848-1906), est connu pour avoir le premier représenté de façon naturaliste les dieux hindous. Le bazar s'empare rapidement de son œuvre, pour la publicité notamment, comme c'est le cas par exemple du savon de la marque Vinolia, ou pour illustrer des boîtes d'allumettes (figg. 46-47).

Ravi Varma est avant tout un peintre de portraits, il gagne des prix grâce à sa maitrise de l'académisme ; mais sa popularité vient directement de sa présence dans le bazar. Via son imprimerie – la *Ravi Varma Fine Art Li-*

thographic Press fondée près de Bombay en 1894 – il répand sur l'ensemble du territoire ses représentations de dieux hindous anthropomorphes, en déclinant systématiquement ses toiles en lithographies et en images bon marché. Cette presse bouleverse à jamais l'histoire de l'art en Inde, produisant des centaines de reproductions envahissant les espaces public et privé. L'esthétique des divinités de Ravi Varma est la première à être panindienne.[15] Les dieux du cinéma et des séries télévisuelles ne cesseront ensuite de s'emparer de cette imagerie, tout en la réinventant avec les effets spéciaux.

Une autre forme fabriquée, exposée et vendue dans le bazar est le collage, présent au Bengale au début du 20e siècle. À l'origine de cet art, des paysages chromolithographiés imprimés en Allemagne et qui s'adressent au public européen en poste dans les Indes britanniques. Ces paysages glissent du cercle des commerçants pour Européens au bazar indien et y subissent de fait un détournement. Le bazar en fait des fonds, des supports, détournés de leur usage et de leur public européen premiers. En effet, esthétiquement, les paysages imprimés *ne suffisent pas* au marché indien, un peu comme s'il manquait quelque chose à ces paysages bucoliques, le plus souvent vides de toute figure humaine. Le collage bengali positionne sur le fond paysager des divinités indiennes, et les éléments qui leurs sont associés, comme des paons par exemple (fig. 48).

Cet art populaire, qui prouve la pénétration en masse de chromolithographies occidentales sur le territoire indien, joue sur l'association de deux tendances populaires propres au bazar : posséder des images « européennes » tout en les enrichissant pour un usage dévotionnel. Cet art renseigne sur la manière dont peuvent être perçues les images « occidentales » au départ : y coller le couple phare Radha et Krishna permet de saisir que tel ou tel paysage européen (un chalet perdu en forêt, un palais italien au bord d'un lac, etc.) possède une imagerie romantique et exotique pour les acheteurs indiens du bazar. Ces images travaillent alors la disjonction à plusieurs niveaux : de l'échelle des objets de l'image (on brise là les codes occidentaux) à la volontaire rupture thématique entre la divinité et son habitat traditionnel. Le collage est une forme hybride entre une œuvre à usage décoratif et/ou usage religieux. Il passe du monde anglo-saxon au monde indien par l'interface créatif du bazar, tout en manifestant une forme d'échange puisque, là où l'Empire britannique dans les expositions coloniales ne cesse de présenter via des images exotiques son « Joyau de la couronne » qu'est l'empire des Indes,[16] ce sont bien des paysages occidentaux qui se trouvent ainsi exposés (bien que détournés) dans le bazar indien. L'Inde n'ayant pas en soi de peinture de paysage, l'engouement pour ces vues de nature, avec ça et là palais et chalet, semble devoir s'accompagner d'un geste de rectification de l'image en vue de l'exposer et de la vendre, la « combler » en y ajoutant la figure d'un dieu. Krishna et Radha aux abords d'un lac ou d'un palais européens provoquent, dans l'hétérogénéité même de cette superposition, un effet d'étrangeté qui ne nuit pas à leur présence divine. Enfin, ces collages proposent un fécond retournement de la notion même d'exotisme,[17] au profit des clients indiens du bazar, puisque ces images font de l'Europe un lieu fantasmé et irrémédiablement « autre », bien que peuplé de dieux locaux.

Ce déplacement d'une figure sur un fond hétérogène me semble le cœur même de l'esthétique du bazar, une autre façon de faire « se mouvoir » l'image fixe. C'est le cas dans les photographies prises en studio, devant des fonds peints ou photographiques. Le studio indien propose aux clients des fonds « modernes » (par exemple des immeubles occidentaux), ou bien offre à un couple la possibilité de poser devant une reproduction du Taj Mahal, même si on habite à l'autre bout du pays. Certaines de ces photos appartiennent d'ailleurs à l'économie de la foire, avec le cas des studios photo ambulants : on se fait tirer le portrait non plus dans le sérieux d'une célébration familiale (diplôme, mariage, naissance) mais pour s'amuser. Les studios ambulants deviennent des attractions ; on joue à être quelqu'un d'autre, dans un ailleurs proche (Taj Mahal) ou lointain (vues de l'Europe). Ces fonds des studios photographiques manifestent un changement d'état, de lieu, d'humeur : la personne photographiée est transfigurée par le changement de décor et de vêtements. La foire permet ainsi de se couler, le temps d'une photographie, dans les habits d'un autre soi.[18] Se jouent ici des questions fortes d'identités, liées à l'apparence des sujets représentés : que ce soit Krishna *déplacé* dans des paysages européens ou des gens photographiés à *l'autre bout du pays*, c'est la place de l'individu dans l'image et dans l'imaginaire qui est interrogée. Il est marquant que le cinéma s'empare de cet usage d'un rapport distancié entre la figure et le fond déjà présent dans les collages ou les photographies : beaucoup de séquences musicales populaires usent d'une soudaine plongée dans un lieu hétérogène, résolument différent de l'espace narratif principal.

Si ces ruptures filmiques ont été analysées, les placer du côté d'une esthétique du bazar permet de les envisager comme un style homogène et partagé de représentation. Le cinéma permet ainsi de faire sortir du lieu physique du bazar et de déployer sur l'ensemble du territoire une esthétique singulière. En faisant du champ visuel local une esthétique plus globale, il devient à son tour un « bazar » traversé par les questions de localisation et de déplacement. Et il faut y ajouter une interrogation sur la place à accorder à l'Occident, sur au moins deux niveaux, thématique et technique : tout comme peinture à l'huile, collage et photographie usent des dispositifs étrangers pour produire une imagerie hybride (abâtardie ?) entre naturalisme et mythologie, le cinéma et les séries télévisées poursuivent la même veine, bien que désormais hors du bazar et à échelle nationale.

Cette profonde transformation des images n'est pas forcément une *indianisation*. Il ne faut pas croire que le seul mouvement du bazar est celui d'une appropriation/vernacularisation systématique d'images et de techniques occidentales. La force du bazar comme lieu créatif est d'aller dans les deux sens, et d'être aussi profondément modifié par les objets et l'esthétique venus d'ailleurs et passant par lui. C'est le cas de l'œuvre d'un peintre comme S. M. Pandit (1916-1993), et de son métissage non avec une imagerie occidentale mais « cinématographique occidentale ». Pandit a, pendant des années, dessiné les affiches indiennes des films des studios américains, modifiant considérablement sa peinture religieuse. Son art rend alors manifeste cette présence de Hollywood et de codes de représentations filmiques occidentaux (fig. 49).

Ainsi, l'autarcie que l'on accole trop souvent à l'art populaire indien (et à l'Inde en général) ne rend souvent pas justice à l'imprégnation des artistes par d'autres systèmes esthétiques. Jain relève ainsi quelques traits évidents de ces rapprochements en regardant la peinture de Pandit :

> *L'influence des affiches des films américains, et surtout le style associé à la MGM, est évident dans son traitement du visage des personnages et de leurs expressions, la peau douce, les joues roses, des yeux de biche, un air apprêté, avec des reflets sur le rebondi des lèvres et des cheveux, comme dans ses représentations de Shiva, héros ressemblant à un Tarzan musculeux et bleuté vêtu d'une peau de léopard ; et aussi dans ses détails disneyens faits de fleurs et d'animaux. Tout comme avec les appropriations antérieures de la peinture et des paysages académiques européens, les représentations hollywoodiennes de figures charismatiques et libidinales nourrissent l'intensification de l'affect personnel dans la représentation des dieux du bazar, même lorsqu'ils sont conformes aux postures iconographiques conventionnelles.*[19]

Le bazar est donc aussi le lieu d'une hybridation d'arts indiens regardant vers l'Occident, vers Hollywood, images qui appartiennent alors à plusieurs référents et à plusieurs mondes, l'usage de l'image ne cessant d'évoluer. Cette hybridité constante des images du bazar en fait le lieu d'une renaissance esthétique et mythologique pour le champ visuel indien. Ni pure création, ni récupération systématique, l'imagerie du bazar traduit la résurgence d'habitudes plastiques, mais comme altérées par tout un réseau de nouvelles images, venues d'ailleurs. Le bazar réexpose les œuvres, les fait siennes, leur donne support et visibilité, tout comme le cinéma populaire ne cesse de reformuler tout autant les films d'action américains que les chorégraphies des films d'arts martiaux de Hong Kong, empruntant par ailleurs largement aux musiques et aux styles de danses du monde entier.

Foires et expositions coloniales, des autres lieux d'exposition créatifs ?

La particularité du bazar est d'autant plus éclatante si on observe d'autres instances elles aussi en relation avec le système britannique : les foires locales et les expositions directement sous autorité britannique. Les archives de l'état du Maharashtra[20] font ainsi çà et là mention de « *fairs* » et d'« *exhibitions* », semblant désigner tout autant des regroupements festifs, commerciaux que des rassemblements religieux qui mobilisent les autorités coloniales. Ces foires ont une dimension calendaire et sont reliées aux différents festivals religieux rythmant la vie sociale indienne. Mais il n'y a la plupart du temps rien sur le contenu et le type d'attractions présentées lors de ces rassemblements. Selon l'historien du cinéma Kaushik Bhaumik, qui a travaillé sur l'émergence du cinéma en Inde,[21] il n'y a pas de traces de ces pratiques populaires car les divertissements (particulièrement folkloriques) présents dans les foires n'avaient pas leur place dans le contexte urbain documenté de l'époque.

En parcourant les écrits des britanniques en poste,[22] on trouve énormément de descriptions de lieux et de coutumes indiennes, des remarques sur la vie locale mais ces écrits s'attachent surtout à dépeindre une Inde intemporelle et « classique ».[23] On peut parfois trouver mention des « amusements » qu'offre le pays, mais le divertissement ne saurait être central au récit. Plus proche encore du pouvoir les expositions « agricoles » ayant lieu pendant la période coloniale. Si l'Inde est très présente dans les expositions à l'international, dans les *world's fairs* où ses richesses sont partout exposées, les expositions que l'Empire organise sur le territoire indien sont surtout des présentations de matériel agricole, dans une tentative de moderniser une population rurale travaillant encore beaucoup de façon traditionnelle. Ces foires agricoles sont aussi le lieu où afficher, expliquer et mettre en place une politique hygiéniste de prévention des épidémies.[24] Elles font se côtoyer deux univers : la technicité/la science coloniale et le spectaculaire/divertissement souvent local ; en effet ces expositions agricoles proposaient aussi des divertissements et des attractions au public rassemblé, public hétérogène mêlant Européens et Indiens. Tout comme le bazar faisant tenir ensemble image dévotionnelle et fonction décorative, l'exposition agricole mêle discours technique « moderne » à des attractions folkloriques. Par exemple, l'historien Gyan Prakash relève dans les rapports officiels de l'exposition agricole de 1873 à Fureedpur la présence de *jatra* (théâtre traditionnel bengali) et de *nautches* (danses populaires) ; ces performances sont là « principalement pour l'amusement des classes populaires qui ont toujours un goût marqué pour ces choses-là ».[25] Il ajoute en note qu'un autre rapport mentionne que des « spectacles de cirque et de bioscope ont été donnés sous la dénomination d'amusement de pédagogie scientifique ».[26] Il y a donc, au sein des expositions coloniales, comme pour le bazar, un mélange intéressant entre des spectacles (danse, bioscope, théâtre) et des enjeux économiques et politiques. Dans le cas de la lanterne magique indienne, plus détaillée dans un article du volume précédent,[27] c'est un objet étranger, exploité par une famille marathie donnant des spectacles animés sur la vie du dieu Krishna. Cette lanterne circule dans le nord de l'Inde jusqu'en 1918 et remporte un prix[28] dans une exposition agricole, mais pour ses « peintures » ! Le côté un peu surprenant de cette récompense montre bien que ces expositions scientifiques étaient aussi des rassemblements populaires où l'ambition première de modernisation de l'agriculture locale côtoie les habitudes des festivals vernaculaires. Le fait que la lanterne magique remporte un prix montre qu'elle fait partie plutôt de l'exposition que des spectacles programmés pour attirer le public local et l'inviter à « s'instruire ». Néanmoins, ses thèmes religieux et son esthétique la placent aussi du côté des divertissements traditionnels. La lanterne semble appartenir aux deux mondes, Europe et Inde, pourtant si séparés dans les études sur le contexte indien à cette période : elle use d'une invention scientifique occidentale pour exposer des thématiques profondément indiennes.

Le cinéma, présent sur le territoire indien quasi dès son invention, poursuit de fait la même logique : c'est un appareil étranger vite assimilé par des entrepreneurs locaux et qui commence sa « carrière » sur le territoire indien par la représentation mythologique. Le cinéma, présent dans le bazar comme dans les foires est, comme les calendriers, une forme d'art qui s'est affranchie des *lieux* pour régner plus largement sur le champ visuel, tout en creusant un ensemble de thématiques (fond/figure, exotisme de l'Europe, images mythologiques, etc.) qui ne lui appartiennent pas en propre. Si on repose la question de l'exposition des images, la foire agricole et l'exposition coloniale, malgré un contexte partagé avec des entrepreneurs locaux et le fait d'héberger un certain nombre de spectacles folkloriques, ne produisent pas la même *rencontre* esthétique que le bazar qui, lui, dépasse l'exposition pour aller vers la transformation/reformulation. Vite perçu comme un lieu vernaculaire, autarcique, insaisissable par le pouvoir colonial, ce dernier a bien plus œuvré, dans le cas d'œuvres hybrides (collages, bioscopes, lithographies), que les foires qui mettent en contact pourtant *officiellement* le monde occidental et le monde indien. C'est la différence, soulignée par l'historien du théâtre Nicola Savarese dans son étude du théâtre eurasien, entre le *contact* et *l'influence*.[29] Plus encore, sa définition des superpositions culturelles, dans le cas du théâtre chinois, résonne ici tout particulièrement : « *invasion et domination par des peuples étrangers, batailles intérieures, les ouvertures périodiques à des goûts étrangers, tout ceci très certainement parfume le flot d'idées étrangères et la croissance d'habitudes et d'intérêts nouveaux* ».[30]

Lieu ancestral, point d'échanges commerciaux et politiques, le bazar est le creuset esthétique, toujours recommencé, de l'imagerie populaire indienne.

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Illustrations

46. Raja Ravi Varma, *Jatayu Vadham* (1895).
47. Boîte d'allumettes (CIViC Archives).
48. Collage bengali sans titre représentant Krishna, non daté, collection personnelle.
49. S.M. Pandit, *Krishna and Radha*, par Subha Murugan.

Notes

[1] C. A. Bayly, *Rulers, Townsmen and Bazaars : North Indian Society in the Age of British Expansion, 1770-1870* (2012).

[2] Les Britanniques instaurent la Compagnie des Indes et son système de comptoirs commerciaux dès 1600. Ce statut change en 1858, lorsque que le pays est annexé sous l'autorité de l'Empire.

[3] Anand A. Yang, *Bazaar India : Markets, Society, and the Colonial State in Gangetic Bihar*, University of California Press, Berkeley 1998.

[4] Georges Francklin Atkinson, *« Curry and Rice » on Forty Plates. The Ingredients of Social Life*

at « Our Station » in India, Day & Son, Londres, non daté et non paginé. Je traduis toutes les citations de cet article.

[5] Kajri Jain, *Gods in the Bazaar : The Economies of Indian Calendar Art*, Duke University Press, Durham 2007, introduction, p. 78.

[6] A ce sujet, voir Christopher Pinney, *« Photos of the Gods » : The Printed Image and Political Struggle in India*, Reaktion Books, Londres 2004 ; Kajri Jain, *Gods in the Bazaar*, cit. ; Sudhir Mahadevan, *A Very Old Machine : The Many Origins of the Cinema in India*, State University of New York, New York 2015.

[7] Voir la circulation des œuvres du peintre S. M. Pandit, dans Kajri Jain, *Gods in the Bazaar*, cit., pp. 155-156.

[8] *Idem*, p. 14.

[9] *Idem*, p. 38.

[10] Kajri Jain, *Gods in the Bazaar*, cit., p. 26.

[11] Réalisateur Ramanand Sagar, 78 épisodes de 35 minutes, diffusés le dimanche matin de janvier 1987 à juillet 1988.

[12] Producteur Baldev Raj Chopra, réalisateur Ravi Chopra, 94 épisodes de 45 minutes, diffusés le dimanche d'octobre 1988 à juin 1990.

[13] Ceci est relevé par Purnima Mankekar, *Screening Culture, Viewing Politics : An Ethnography of Television, Womanhood, and Nation in Postcolonial India*, Duke University Press, Durham 1999 ainsi que par Rachel Dwyer, *Filming the Gods : Religion and Indian Cinema*, Routledge, Londres 2006.

[14] Chidananda Das Gupta, « The Social Cost of TV *Ramayan* », dans Jag Mohan (sous la direction de), *Indian Cinema 1988*, Directorate of Film Festivals, New Delhi 1989, p. 95.

[15] Selon Tapati Guha-Thakurta : « C'est ainsi [avec la mise en place d'une presse à oléographies à Bombay] que commença la production de masse et une circulation à l'échelle du pays tout entier des reproductions aux couleurs vives des images pauraniques [extraites des Pauranas, recueil de contes religieux] de Ravi Varma. Ravi Varma, le nom le plus prestigieux dans l'émergence des cercles de l'art anglo-indien, se trouva aussi transformé en symbole le plus populaire de l'art de masse ». (Tapati Guha-Thakurta, *The Making of a New « Indian » Art : Artists, Aesthetics and Nationalism in Bengal*, Cambridge University Press, Cambridge 1992, p. 106).

[16] « Au début, les provenances géographiques [dans les expositions coloniales] n'étaient qu'accessoires. En 1851, seuls cinq cent vingt exposants sur quatorze mille étaient d'origine coloniale. A partir de 1886, les expositions furent presque entièrement consacrées à l'Empire, et à mesure que celui-ci s'étendait, l'équilibre par rapport à l'Inde, qui, pour l'exposition de 1882, occupait un espace quatre fois plus grand que la trentaine d'autres colonies britanniques réunies, fut progressivement infléchi ». John MacKenzie, « Les expositions impériales en Grande-Bretagne », dans Nicolas Bancel, Pascal Blanchard, Gilles Boetsch, Eric Deroo, Sandrine Lemaire (sous la direction de), *Zoos humains, XIX^e et XX^e*, La Découverte, Paris 2002, p. 194.

[17] Bien que n'évoquant pas ce cas particulier, la question de l'inversion du regard exotique est particulièrement intéressante dans l'ouvrage de Jean-Pierre Dubost et Axel Gasquet (sous la direction de), *Les Orients désorientés : déconstruire l'orientalisme*, Kimé, Paris 2013.

[18] Pour une étude approfondie de ces studios photos, voir Christopher Pinney, Suresh Punjabi, *Artisan Camera. Studio Photography from Central India*, Tara Books, Chennai 2014.

[19] Kajri Jain, *Gods in the Bazaar*, cit., pp. 158-159.

[20] Maharashtra State Archives, à Bombay. Les archives n'étant pas totalement numérisées et indexées, j'ai parcouru en novembre 2016 les registres de 1843 à 1895. Ce sont le plus souvent des informations portant sur la politique de la région, l'application de décrets, l'organisation du territoire, les foyers infectieux (choléra), les pétitions…

[21] « Cinematograph to Cinema, Bombay 1896-1928 », dans *BioScope*, 2 :41, 2011.

[22] J'ai consulté quelques archives dans la bibliothèque du mémorial de Nehru, à Delhi en novembre 2016, mais loin de toute exploration exhaustive du fonds. Un récit composé de « lettres » allant de 1874 à 1889 est particulièrement exemplaire : *A Young Victorian in Indian : Letters of H.M. Kisch*, Jonathan Cape, Oxford 1957 ; voir aussi (et les titres sont révélateurs) Rev. Joseph Mc Glinchey, *Mission Tours India*, Cambridge University Press, Boston 1925 ; Janet Dunber, *Golden Interlude : The Edens in India 1836-1842*, John Murray, Londres 1955 ; Norah Rowan Hamilton, *Through Wonderful India and Beyond*, Holden and Hardingham, Londres 1915.

[23] Ceci rejoint l'idée que l'Europe est « moderne » alors que l'Inde vit dans une forme primitive. Cette idée de l'Inde comme image de l'enfance de la civilisation européenne est analysée par Wilhelm Halfbass, *India and Europe : An Essay in Understanding*, State University of New York Press, Albany 1988, et par Ronald Inden, « Orientalist Constructions of India », dans *Modern Asian Studies*, vol. 20, n° 3, juillet 1986.

[24] Sur l'importance des foires à cette période, voir Carol Breckenridge, « The Aesthetics and Politics of Colonial Collections : India at World Fairs », dans *Comparative Studies in Society and History*, vol. 31, n° 2, avril 1989.

[25] Government of Bengal, Financial Department (Industry and Science), Proceeding no. 3.315, March 1876, IOLR, P1894.

[26] Report on Pagla Mian's Mela, *Idem*, note 63, p. 177.

[27] Amandine D'Azevedo, « La danse de la lanterne magique indienne », dans *A History of Cinema Without Names/3*, Udine / Gorizia Film Forum 2017, Mimesis, Milan 2018, pp. 233-243.

[28] « Certificat of Merit », Médaille d'or, Agricultural and Industrial Exhibition, Jalgaon, 1910, fonds Patwardhan.

[29] Nicola Savarese, *Eurasian Theatre : Drama and Performance Between East and West from Classical Antiquity to the Present*, (Laterza, Rome 1992), Icarus/Routledge, Holstebro 2010 pour la traduction anglaise, p. 22.

[30] *Idem*, p. 46.

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Exposition des non-alignés

La dynamique du bazar invite à repenser l'exposition des images en mouvement, en superposant plusieurs moments de leur histoire et plusieurs lieux de leur migration selon un principe délibérément non linéaire : l'Inde coloniale et ses expositions (notamment *Colonial and Indian Exhibition* en 1886 au sud de Londres), le « bazar vernaculaire » selon le mot de Kajri Jain[1] qui s'étendra ici sur l'axe des non-alignés, de Bombay à Dakar, enfin les biennales et foires d'art contemporain. Une œuvre est au cœur de ce jeu de calques mixant et faisant converser les images, cultures et passés des colonies : la série de vidéos d'Aurélien Froment *Non-alignés* (2016). Il s'agit de trois films tournés par l'artiste français à Dakar en trois jours (après deux jours de repérage) avec une communauté sénégalaise pétrie de culture bollywoodienne performant les chansons et danses de films populaires des années 2000. Son geste ne semble pas motivé par la découverte fascinée d'un double exotisme (Indafrique) mais par le questionnement de la migration des chansons des films hindis en Afrique. Le projet est né de la rencontre entre Aurélien Froment et un passeur d'images et de culture, Sommath Mukherjee. Cet Indien de 55 ans a quitté son pays natal en 1982 pour faire le tour du monde à vélo avant de s'installer à Dakar où il vit depuis vingt ans en vendant musiques et films de son pays d'origine. Pour une exposition de la Biennale de Dakar en 2016,[2] « La quête du pouvoir de l'Inde 1966-1992 (La politique étrangère d'Indira Gandhi) », qui regroupait une vingtaine d'artistes sénégalais, indiens, français, polonais, etc., le commissaire Sumesh Sharma a provoqué la rencontre entre Froment et Mukherjee puis avec les membres de l'association culturelle indo-sénégalaise que celui-ci a fondée (Bharat Pehchane/Les Amis de l'Inde). Le titre de l'exposition, comme de l'œuvre présentée par Froment, invitent à inscrire la trajectoire singulière de Mukherjee dans le mouvement du non-alignement porté par Indira Gandhi et à considérer Dak'Art comme le contre-champ des biennales et foires d'art contemporain des pays impérialistes. En outre, la biennale a investi l'ancien Palais de justice construit par une agence parisienne et inauguré le 26 décembre 1958 par le Haut commissaire général de la République en Afrique occidentale française, Pierre Messmer. Le point de vue adopté par Froment dans chacune des vidéos réfléchit à ce passé colonial dans un rapport figure/fond souvent complexifié par des mouvements de caméra sur la baie et la ville de Dakar. Dans l'une, le toit même du Palais devient une scène pour exposer la danse bollywoodienne performée par une jeune Sénégalaise et un belvédère pour lui donner un tout autre espace de résonnance. Le carton introduisant le film insiste sur cette attention à l'histoire des lieux jusqu'à omettre la référence de la chanson et du film hindi dont elle est tirée. « Hema Malini Sy et Daouda Ndao. Palais de Justice, Cap Manuel, Dakar, 1958 ». Sont donc précisés les noms des performeurs, le site du tournage et une date qui renvoie directement au passé colonial du Sénégal alors que le Palais de Justice a été abandonné depuis les années 2000.

« Hema Malini ». Le premier nom évoque l'actrice de *Sholay* (Ramesh Sippy, 1975), Hema Malini, et rappelle l'engouement suscité par Bollywood au Moyen Orient[3] et dans certains pays d'Afrique subsaharienne et transmis de génération en génération à commencer par le choix de donner aux enfants des noms d'acteurs et actrices. Hema Malini n'est pas un pseudo de scène, mais le nom même de cette jeune Sénégalaise d'une vingtaine d'années qui réinterprète la danse d'une actrice d'une génération ultérieure à celle de la Malini, Madhuri Dixit dans *Devdas* (S. L. Bhansali, 2002) et s'inscrit dans une filiation des noms d'actrices révélant d'autres ramifications au Bollywood que l'on a trop souvent circonscrit à Bombay. Ajoutons que la résonnance de cette influence indienne sur la communauté sénégalaise en particulier mais aussi en Afrique de l'Ouest s'étend par les marchés : à Dakar, les étals du HLM proposent saris, bijoux plaqués or, *bangles* et *bindis* ; au Bénin, au Togo, au Ghana, les chromolithographies des dieux hindous s'échangent dans les bazars auprès des Indiens de la diaspora comme des Africains de la religion vodun.

« Palais de Justice (1958), Cap Manuel, Dakar. Architectes : Boy & Semichon, Paris. Patrimoine national ». Le lieu de tournage et la date de construction du bâtiment renvoient directement à l'histoire coloniale. Même si le Palais de Justice n'est pas reconnaissable et réduit à un toit-scène, il est désigné. Le contexte historico-politique est d'ailleurs le point de départ du film de Froment qui ne s'ouvre ni sur la musique ni sur cet espace de la danse, mais sur la mer et le silence. La caméra surplombant la baie découvre ensuite la pointe de Cap Manuel qui donne un tout autre espace de résonnance à la reprise musicale et dansée comme Aurélien Froment le développe :

> *Au-delà du panneau publicitaire qui vante les mérites des crèmes blanchissantes auprès des femmes d'Inde, du Moyen et du proche Orient et d'Afrique, au bout de la pointe se trouve l'ancien camp de quarantaine transformé en prison. On passe ensuite au-dessus des toits des différents bâtiments du Palais de justice. Au fond, derrière Hema, c'est le quartier du Plateau, où l'on aperçoit les grands hôtels européens, le palais présidentiel, l'ambassade de France et du Royaume Uni et au bout de l'avenue, le toit de l'IFAN (Institut Fondamental d'Afrique Noire, ancien Institut Français d'Afrique Noire). Les lieux ont donc été choisis pour mettre en scène cette relation Inde-Sénégal sur fond d'histoire coloniale, et également pour « représenter » une transformation du paysage au sein de chaque plan, qui se ferait le lointain écho du trajet qui fut celui de Sommath Mukherjee, de Calcutta à Pikine.*[4]

Au terme de ce lent panorama, une coupe fait apparaître à l'avant-plan les deux jeunes performeurs comme immobilisés par un arrêt sur image. Il s'animent dès les premières notes de la chanson « *Kaahe chhed mohe* » extraite de *Devdas*. Hema danse « accompagnée » de Daouda Ndao assis en tailleur devant un *dholak* invisible dont il joue virtuellement. Le *playback* du chanteur et musicien est le premier indice d'une structure contrapuntique dont je déclinerai les différentes superpositions.

La danse est mise en scène dans un espace feuilleté autant horizontalement (dans la profondeur de champ avec le rapport figure/fond) que verticalement (l'architecture du Palais de Justice), composé des tensions de l'histoire coloniale d'autant que le Palais a été abandonné au milieu des années 2000 et transformé en salle d'exposition pour Dak'Art en 2016 justement.[5] Cette stratification guide et active le regard du spectateur qui peut superposer encore d'autres couches culturelles, historiques, géographiques en tissant des liens d'une colonie à l'autre, de l'Afrique à l'Inde, d'un espace filmique à l'autre – toit du Palais de Justice de Dakar, palais d'une courtisane de Lucknow dans *Devdas* – et encore d'un corps de danseuse à l'autre (Hema Malini Sy/ Madhuri Dixit).

Contrepoint

Les performeurs du film de Froment reprennent le principe de dissociation corps/voix des films populaires indiens, en calant le mouvement de leurs lèvres sur les paroles des chanteurs Pt. Birju Maharaj et Kavita Krishnamurthy et sur le récitatif de Madhuri Dixit jusqu'aux gestes rythmiques du percussionniste.[6] La danseuse fait siens les mots et le récit de la chanson évoquant les amours de Krishna et Radha. De la danse emblématique de la courtisane Chandramukhi incarnée par Madhuri Dixit, elle reprend certains gestes, sans doute les plus partageables, exprimant la séduction (avec les mains soulignant l'amande des yeux), et les émotions (comme le cœur qui bat la chamade). En revanche, Hema, pourtant vêtue comme la courtisane d'un corsage et d'une grande jupe rouges brodés de sequins, a délaissé le voile qu'évoque la chanson[7] et qui est un accessoire majeur du jeu de séduction entre Radha et Krishna par ailleurs décliné par de nombreux films indiens. Les gestes de Chandramukhi mimant le badinage amoureux avec son voile et le réactivant à l'intention de Devdas sont élidés par Hema comme ceux plus pittoresques des femmes portant les jarres d'eau sur la tête. La reprise de la danse gomme les spécificités narratives et culturelles du mythe et du film hindi. En effet, si la danse de Madhuri Dixit reprend le principe structurel de la danse indienne classique alternant moments de danse pure (*nritya*) et de danse narrative et expressive (*abhinaya*)[8] marquant des pauses rythmiques où la danseuse mime l'épisode mythologique par toute une codification de gestes (*mudras*), Hema ne marque qu'un de ces moments par un bref passage au sol et l'enchaînement de *mudras* disant la tentation de la jeune femme face aux avances du jeune homme. La danseuse sénégalaise privilégie la danse pure et l'ivresse des tours de plus en plus rapides comme le corps de ballet accompagnant Chandramukhi. Bien sûr on reconnaît encore dans ces tours et frappes de pied la syntaxe de la danse des *tawaifs*[9] qui a pour origine le *khatak* (style de danse classique de l'Inde du Nord) même si le cinéma a participé à métisser et appauvrir cette forme. En outre, le tour n'est-il pas aussi le symbole universel de la danse, de toutes les danses autant rituelles que folkloriques, populaires que classiques ? Hema n'incarne pas une femme en particulier comme Radha se distinguant des autres *gopis*,[10] mais la femme séduite. De l'une des plus fréquentes références mythologiques dans les films populaires indiens (les amours de Radha et Krishna), le local (la campagne du Braj) et l'origine (mythe hindou) ont été délaissés dans cette réappropriation par le mime et la danse, au profit d'un badinage et d'une danse universels. La perte de l'ancrage narratif et mythologique donne à ce moment dansé une valeur plus attractionnelle qui correspond aussi au mode de visionnage le plus répandu des chansons de films hindis, décontextualisées car découpées sur Youtube[11] comme des clips alors que leurs enjeux narratifs sont forts (ici par exemple, le héros masculin Devdas rencontre le second personnage féminin clé du film : Chandramukhi). Pourtant, la dramaturgie de la danse de *Devdas* et de sa reprise sont bien différentes. Si Bhansali insiste sur les échanges de regards entre la danseuse indienne Madhuri Dixit et les spectateurs masculins mimant ses gestes ou les frappes du *dholak*, la danse d'Hema semble soustraite à cet enjeu de séduction même si elle reprend certaines des œillades de la courtisane. Celles-ci ne s'adressent ni à son partenaire ni au spectateur : le cadrage n'est pas frontal et l'échelle de plan toujours large ne découpe ni n'intensifie ces adresses et échanges par des gros plans. Le décentrement invite au contraire le regard du spectateur à explorer les stratifications du rapport figure/fond. La danse est déterritorialisée, coupée de la fiction d'origine mais pour trouver une nouvelle perspective dans un jeu de superpositions fonctionnant comme des couches mémorielles, comme un montage géologique d'une histoire coloniale à l'autre, d'une exposition coloniale à une foire d'art contemporain. En superposant les performances d'Hema et de Chandramukhi se télescopent les palais de Justice et d'une courtisane, le quartier le plus européanisé de Dakar et Lucknow, ancienne cour royale où les *tawaifs* étaient les passeuses d'une tradition artistique chantée et dansée qui furent réduites au statut de prostituées par les Britanniques à l'ère coloniale. D'une architecture à l'autre, le fond est mis en crise comme un contrepoint au Film de Splendeur défini par Lindsay.[12] Le film avec Hema Malini Sy est dans une dynamique de réplique (à la fois reprise et réponse) avec celui de Bhansali, comme le sont aussi les deux autres vidéos de Froment (l'une filmant Ousmane Diallo, l'autre Fatim Diop) avec, respectivement, les séquences musicales « *Tujhe Dekha To Yeh Jaana Sanam* » de *Dilwale Dulhania le Jayenge* (Aditya Chopra, 1995) et « *Dil Main Hai Pyar* » de *The Hero, Love Story of a Spy* (Anil Sharma, 2003).

Contrechamp

Selon le mot d'Aurélien Froment, le film avec Hema est pensé comme le contrechamp de celui avec Ousmane Diallo.

> *D'un côté, la carte postale coloniale, comme une publicité d'Air France, avec ciel bleu, front de mer et ville moderne ; de l'autre, Pikine, ville satellite de Dakar, construite sur des marais asséchés par l'administration française au début des*

> *années 1950, pour y abriter temporairement les migrants de toute l'Afrique attirés par le développement sénégalais. Evidemment, le provisoire est devenu permanent.*[13]

Si bien que chaque vidéo de *Non-alignés* est comme le plan d'*un film*. Le troisième moment, avec la danse de Fatim Diop est encore le contre-champ possible d'un des deux autres. Il reprend l'effet carte postale (danseuse au coucher de soleil devant la mer), intensifie même la valeur attractionnelle avec un cadrage plus serré et plus frontal et l'oubli des enjeux narratifs de *The Hero* alors que la séquence musicale marque un climax : la même chanson est reprise à deux moments du film pour accompagner le mariage du même homme (Sunny Deol) avec deux femmes différentes (Preity Zinta puis Priyanka Chopra, la première assistant au mariage de la seconde). Le contrepoint audiovisuel du film de Sharma, l'ironie de la situation sont gommés : les paroles de *Dil Main Hai Pyar* semblent pouvoir chanter indifféremment n'importe quel amour. La danse de Fatim donne lieu à une interprétation d'autant plus libre que la danse de Preity Zinta dans le film hindi est réduite à quelques moments relativement courts, la mise en scène s'attachant à révéler la supercherie de l'homme par la tension des échanges de regards. A côté des mouvements de *belly dance* et de certains passages mimés, Fatim a aussi retenu les tours ininterrompus et accélérés jusqu'au vertige et à la chute de la danseuse indienne (ici retenue) transformant ici en ivresse et exaltation ce qui tenait autant du dépit que du défi pour dénoncer le traître dans le film hindi. Le silence dramatique qui suit la chute est ici écourté. Le geste de Sunny Deol relevant et couvrant de son voile Preity Zinta dans un geste qui réactive le rituel du mariage est ici transformé, édulcoré par un porté romantique grâce à l'apparition d'un jeune homme surgi du hors-champ. Le contrepoint se joue ici moins dans la tension image/chant que dans la profondeur de champ. Le carton précise « Fatim Diop. Ile de Gorée ». La danse de Fatim a donc pour horizon l'Île de Gorée dont on se souvient que la prospérité fut liée au commerce des esclaves et à l'organisation économique des colonies d'Amérique.

La déterritorialisation des chansons des films populaires en hindi a donc lancé la piste de l'attraction. Comme je l'ai étudié pour une précédente session d'*Histoire du cinéma sans noms*, les espaces filmés et les fonds de nombreuses séquences musicales fonctionnent comme des attractions que l'on peut rapprocher de celles des grandes expositions. Citons l'exotisme des pyramides de Gyzeh dans *Kabhi Kushi Khabie Gham* (Karan Johar, 2001) – que l'on aurait pu voir dans l'exposition Panama Pacific de San Francisco en 1915 entre autres compte tenu de l'égyptophilie de l'époque – ou encore celui des verts alpages helvétiques ou les montagnes enneigées de *Dilwale Dulhania Le Jayenge* (Aditya Chopra,[14] 1995) comparable au village suisse reconstitué de l'Exposition universelle de 1905 à Paris.[15] Dans la séquence musicale « *Tujhe Dekha To Ye Jaana Sanam* », le rapport figure/fond, le couple indien (renvoyant encore à celui mythologique de Radha et Krishna) devant un paysage européen bucolique ou pittoresque, peut aussi être pensé par rapport aux collages vendus dans les bazars indiens étudiés par Amandine D'Azevedo.[16] Les corps dansant d'Hema et Fatim au premier plan des films de Froment relèvent aussi du collage et de l'esprit du bazar par rapport aux fonds d'un pays européanisé et colonisé. Autre jeu de champ-contrechamp : l'exotisme du « village suisse » en France au début du 20e siècle comme en Inde à la fin des années 1990. Au panorama des expositions universelles montant des vues du monde et des spectacles de l'autre répond aussi la tradition des planches éducatives illustrées de l'Indian Book Depot toujours distribuées dans les écoles. On y retrouve les pyramides de Gyzeh et les Alpes suisses dans la série « *Around the World* » et encore aujourd'hui les peuples du monde sont représentés dans « *Children of the World* » en costumes traditionnels (comme celui de Nice pour la France) ou en costume antique (une petite Cléopâtre pour l'Egypte). Pourtant la première image de la planche montrant un Indien semble réduire au maxima les particularités par rapport à la planche « *Children of India* » qui les différencient selon les régions.[17] La discussion sur l'attraction mérite d'être poursuivie par rapport aux expositions universelles en ajoutant celles des expositions coloniales et ethnographiques (1886, 1887, 1907, 1931 par exemple), autant pour leurs « villages indigènes » et sénégalais en particulier que pour les numéros dansés des *nautch girls* auquel le cinéma a donné une plus large diffusion. *Non-alignés* propose pour moi un négatif, une critique du contexte culturel qui a fait le succès de ces expositions, celui d'une fascination pour l'exotisme et d'un essor des nationalismes et de l'impérialisme.

Quand la voix rauque a capella d'Ousmane Diallo entonne la chanson « *Tujhe Dekha To Ye Jaana Sanam* » du film de Chopra tourné dans une Suisse de carte postale ou d'images d'Epinal, la caméra de Froment découvre le paysage verdoyant des marais asséchés de Pikine, puis ses bidonvilles et logements précaires. Ici, l'orchestre et les voix des deux célèbres chanteurs qui ont doublé tant d'acteurs indiens, Kumar Sanu et Lata Mangeshkar, se sont éclipsés, contrairement aux deux autres films de Froment qui conservaient les versions originales des chansons. Le contrepoint est dans cette tension audiovisuelle, entre un homme qui chante son arrivée sur la terre de sa bien aimée et le panorama sur Pikine qui se déroule derrière lui. Cette forme du panorama pervertit celle des grandes expositions (à commencer par celle de *Panama Pacific*) et de certains de leurs dispositifs de monstration comme les dioramas. Je fais donc l'hypothèse que la vue d'Ousmane dans ce décor serait comme l'envers ou le négatif des dioramas présentant les indigènes dans les expositions coloniales. Ces zoos humains ont déjà été longuement commentés, je ne citerai donc que quelques exemples pour rappel. D'une part, la Colonial and Indian Exhibition de 1886 où plusieurs douzaines d'Indiens furent amenés, depuis la prison d'Agra, pour servir d'expositions vivantes ; présentés comme des artisans, ils avaient été entraînés dans leur domaine de compétence dans le cadre du projet qu'avait l'empire britannique de réformer les « castes criminelles ».[18] En 1906 en France,

> *une caravane hindoue d'une centaine de personnes s'installa sur la grande pelouse du jardin zoologique d'acclimatation. Charmeurs de serpents, montreurs d'ours, danseuses s'y produisirent […] Des fakirs installés sur des planches faisaient la démonstration des postures périlleuses et contorsions spectaculaires de leurs membres résultant des pratiques du yoga. Mais le public put aussi contempler les Indiens du Sud dans leurs autres activités artistiques ou domestiques plus conventionnelles, telles que la cuisine, la gravure, la broderie ou le dessin.*[19]

Lors de la première exposition ethnographique sur l'Afrique occidentale en 1887 au jardin zoologique d'acclimatation,

> *les Africains de l'Ouest furent présentés aux Français après que les expositions ethnographiques eurent abandonné le terrain de la science pour celui du spectacle de cirque. Cela eut pour conséquence que, à l'instar des magazines illustrés, le média qu'était l'exposition ethnographique s'attacha à montrer les Africains de l'Ouest dans un décor spectaculaire et sensationnel. On mit l'accent sur leurs coutumes bizarres, leur férocité et leur sauvagerie afin d'attirer et de distraire les foules.*[20]

Le « village sénégalais » a circulé dans de nombreuses expositions en Europe[21] et donné lieu à des éditions de cartes postales qui ont contribué à nourrir les représentations de l'autre.[22] On se souvient encore que l'exotisme des danses du monde (particulièrement les *nautch girls*) a suscité l'engouement des publics parisiens, londoniens, new-yorkais ou encore chicagoans. Nombreux sont les films à avoir enregistré ces performances mais aussi celles des danseuses occidentales s'inspirant des styles orientaux (Ruth Saint Denis, Cléo de Mérode, Madame Laurka, Mata Hari).

La référence aux zoos humains et autres ethno-shows et la non-linéarité de l'histoire des représentations peut surprendre ici, mais non parce que ces pratiques seraient révolues – Pascal Blanchard a fait le constat de formes contemporaines de zoos humains citant, entre autres, l'exemple d'un *village massaï* ouvert en Belgique en 2001[23] – plutôt parce que l'œuvre de Froment ne les dénonce pas directement comme la performance de Coco Fusco et Guillermo Gomes Peña : *The Couple in a Cage : Two Amerindians Visit the West* en 1992.[24] C'est dans le jeu de superpositions complexe et poursuivi tout au long de la réflexion que s'est fait le rapprochement entre les expositions universelles, coloniales ou encore ethnographiques et les foires d'art contemporain. Celles-ci témoignent aussi d'un goût pour l'exotisme, avec la captation par les galeries occidentales d'artistes des pays émergents. Très peu de galeries indiennes et africaines sont présentes dans les foires comme la FIAC (Foire internationale d'art contemporain) où était présenté *Non-alignés* en 2016, peu en auraient par ailleurs les moyens.[25] Notons tout de même l'Afrique à l'honneur pour Art Paris en 2017 dont la commissaire invitée pour ce focus, Marie-Ann Yemsi, souhaitait aller à l'encontre d'une Afrique exotique ne serait-ce qu'en évitant de parquer les galeries et les artistes africains dans un espace réservé.[26] Par ailleurs, que penser des foires *réservées* à l'art africain en dehors du réseau des principales foires internationales du marché de l'art :

AKAA, Also Known As Africa (foire internationale d'art contemporain et de design centrée sur l'Afrique) qui a lieu à Paris depuis 2016 et 1:54, Contemporary African Art Fair de Londres depuis 2013 et New York depuis 2015 ? La présence de *Non-alignés* à la FIAC ne peut pas être pensée en dehors du marché de l'art et de ses axes dominants aux dépens du Sud Global. Aussi, sa présentation est pour moi un geste rétrospectif critique de l'exposition des anciennes colonies et la possibilité d'un regard sur un axe que l'on continue à qualifier de subalterne.

La présence de la mer dans les films de Froment est d'ailleurs remarquable sur la question du non-alignement et de la migration culturelle, proposant une vision alternative aux routes maritimes des vagues de colonisation. Pour conclure sur cet axe, je m'attarderai sur l'infiltration de la culture indienne et de la religion hindoue en Afrique, une façon de penser l'Inde non plus comme un territoire exotique géographique et culturel selon les *colonial studies* mais comme un imaginaire et une idée. Les travaux de Dana Rush sont sur ce point essentiels particulièrement ceux sur les « imaginaires de 'l'Inde' dans l'art, la pratique et la pensée vodun d'Afrique de l'Ouest ». L'emploi des guillemets autour du terme Inde révèle qu'il « ne s'agit pas de l'Inde comme pays ni même plus largement comme lieu marqué par l'altérité et le lointain, […] l'enjeu est plutôt de souligner l'existence d'une véritable *idée* de l'Inde (au sens d'imaginaire), qui va bien au-delà d'une définition géographique » ; « Pour les adeptes du *vodun*, l'Inde est synonyme de la mer. La pratique et l'art vodun sont tous associés à l'Océan par ceux qui les célèbrent. De la même façon, les esprits provenant de l'Océan entretiennent un 'lien' avec l'Inde ».[27] Dana Rush saisit cette équivalence Inde/mer dans ses conversations avec Mama Sikavi qui vend des chromolithographies de divinités hindoues sur un marché togolais et dit indifféremment qu'elles viennent de l'Inde, de la mer, « un lieu qu'il n'est pas possible de connaître en profondeur mais auquel elle se sentait appartenir ». Le film de Froment avec Hema s'ouvre sur la mer et décrit la baie jusqu'au Palais de Justice de Cap Manuel, comme le trajet de Mukherjee de Calcutta à Pikine dit Froment, mais je vois aussi dans ce panorama sur la mer qui est aussi le fond du film avec Fatim Diop une présence dans l'image non d'une Inde lointaine, d'une origine de l'écho musical et dansé à Dakar mais cette idée de « l'Inde », complexifiant encore les enjeux géoesthétiques et historiques de ces migrations d'images et de sons.

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Dana Rush, *Vodun in Coastal Bénin : Unfinished, Open-ended, Global*, Vanderbilt University Press, Nashville 2013.

Notes

[1] Kajri Jain, *Gods in the Bazaar : The Economies of Indian Calendar Art*, Duke University Press, Durham 2007.

[2] L'exposition principale, « La Cité dans le jour bleu » avait pour commissaire Simon Djami et se tenait dans l'ancien Palais de Justice.

[3] Rappelons d'une part le succès des films populaires indiens au festival de Marrakech et d'autre part la vidéo de l'artiste Katia Kameli *The Storyteller* (2012) montrant un conteur, Abderahim Al Azalia, porteur d'une tradition marocaine ancestrale : la halqa ou cercle de spectateurs, est pratiqué sur la place Jamaa El Fna et animé par le hlaïqya. Al Azalia lui a donné une forme particulière en interprétant à sa manière des films bollywoodiens, ici *Dosti* de Sayten Bose. La mise en abyme clôt le film de Kameli lorsqu'Al Azalia raconte comment Ramu et Mohan, les deux protagonistes de *Dosti*, échappent à leur condition : tandis qu'ils jouent de la musique, un cercle se forme autour d'eux.

[4] Aurélien Froment, mail du 15 février 2018.

[5] *Non-alignés*, faisant partie des expositions de la biennale confiées à des commissaires internationaux, était projeté non loin du Palais de Justice dans les salles de l'IFAN.

[6] Notons que dans cette chanson en particulier le corps féminin a deux voix celle relativement grave de l'actrice pour le récitatif et celle de la chanteuse Kavita Krishnamurthy pour le refrain s'envolant dans les aigus.

[7] *Sar se mori chunari gayi, gayi, gayi* : mon voile glisse, glisse, glisse de ma tête. Le *dupatta* est souvent posé sur les épaules ou sur la tête dans certaines circonstances comme dans les lieux de culte ou en présence d'hommes extérieurs à la famille.

[8] L'*abhinaya* est entre autres caractérisé par l'expression des sentiments dans les styles de danse classique. Les gestes des mains (*mudras*) et le mime permettent à la danseuse d'incarner les différents personnages de l'épisode mythologique raconté.

[9] Dans l'empire moghol, femmes qui excellaient en poésie, musique, chant et danse.

[10] Terme sanskrit désignant les gardiennes de vache. Radha est une gopi.

[11] On risquera ici de faire de Youtube un bazar virtuel, encore considéré comme le contre-lieu d'une culture dominante.

[12] Voir le texte de Marion Polirzstok dans ce même chapitre.

[13] Aurélien Froment, mail du 15 février 2018.

[14] Le cinéaste indien initiait avec ce film tourné en Suisse une longue série de reprises de ce décorum.

[15] Voir Térésa Faucon, « Géoesthétique de l'attraction », dans Diego Cavallotti, Simone Dotto, Leonardo Quaresima, *A History of Cinema Without Names/3*, Mimesis, Milan 2018, pp. 223-232.

[16] Voir aussi pour plus de précisions son ouvrage : Amandine D'Azevedo, *Mythes, films, bazar. Formes transversales des cinémas indiens*, coll. « Formes filmiques », Mimesis, Milan 2018, pp. 176-178.

[17] Voir entre autres sur le site de l'Indian Book Depot (https://www.ibdmaphouse.com/category/educational-charts/13x22-charts/?page=1&limit=21&price_low=1&price_high=660&sort-by=-1&view_type=1, dernier accès 15 juillet 2018) les planches : « Around the World », « Children of the World » et « Children of India ».

[18] Voir Saloni Mathur, *India by Design : Colonial History and Cultural Display*, University of California Press, Berkeley 2007.

[19] Catherine Servan Schreiber, « L'Inde et Ceylan dans les expositions coloniales et universelles (1851-1931) », dans Nicolas Bancel, Pascal Blanchard, Gilles Boetsch, Eric Deroo, Sandrine

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[20] William H. Schneider, « Les expositions ethnographiques du Jardin zoologique d'acclimatation », dans *Zoos humains*, cit., p. 76.

[21] Voir John MacKenzie, « Les Expositions impériales en Grande Bretagne », dans *Zoos humains*, cit., p. 201.

[22] Voir Anne Baldessari, « Corpus ethnicum : Picasso et la photographie coloniale », dans *Zoos humains*, cit., pp. 340-348.

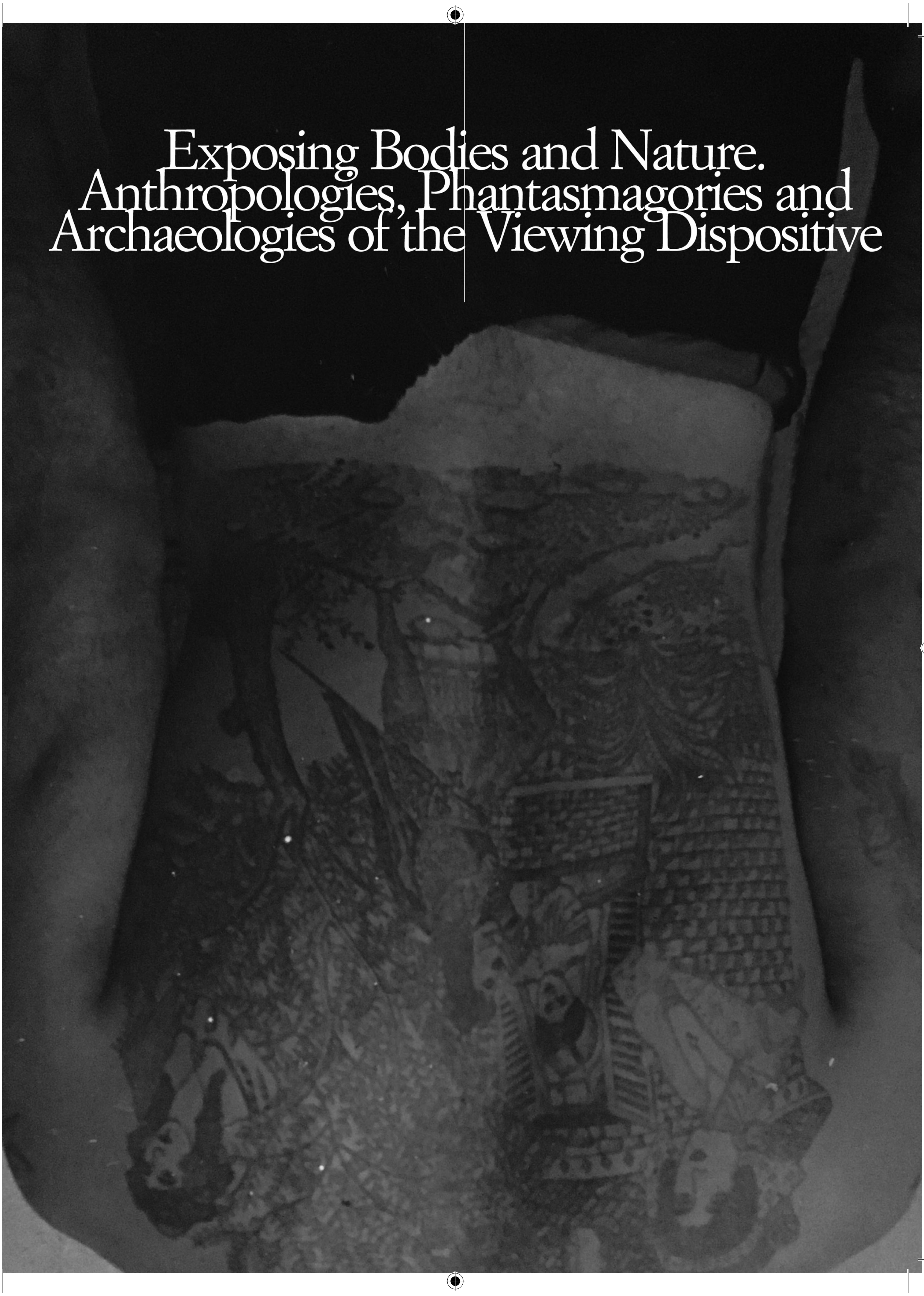
[23] « 'Venez faire connaissance avec le peuple d'Afrique le plus renommé. La différence entre mythe et réalité ne vous décevra pas'. Ces phrases ne sont pas de Karl Hagenbeck, revendeur d'animaux sauvages et promoteur des principaux zoos européens, qui décida dès 1874 d'exhiber des Samoa et des Lapons comme populations 'purement naturelles'. Non, cette 'chaleureuse invitation' à venir 'faire connaissance avec le peuple d'Afrique le plus renommé' vient du site internet d'une association belge, initiatrice d'une exposition vivante sur les Massaïs dans le Domaine des grottes de Han, en Wallonie ». Voir Jean-Claude Mullens, « Du bon usage des stéréotypes en éducation interculturelle », *Antipodes*, n° 155, juin 2001, http://www.iteco.be/revue-antipodes/migrants-d-hier-et-d-aujourd-hui/Des-Massais-a-Han-sur-Lesse,1169, dernier accès 15 juillet 2018 et Nicolas Bancel, Pascal Blanchard, Sandrine Lemaire, « Le spectacle ordinaire des zoos humains », dans *Manière de voir*, n° 58, juillet-août 2001, pp. 40-45.

[24] Les deux performeurs étaient enfermés pendant trois jours dans une cage dorée sur la place Colomb de Madrid en mai 1992. Ils se présentaient comme des aborigènes originaires d'une île découverte pas Colomb dans le golfe du Mexique. Ils s'adonnaient à des tâches quotidiennes y compris écrire sur un ordinateur, regarder la télévision et coudre des poupées vaudou.

[25] L'édition 2018 de la FIAC compte encore parmi ses exposants la galerie Experimenter de Kolkata mais aucune galerie africaine. Est-ce parce que les artistes africains font relativement peu l'objet de spéculation selon le témoignage de la directrice artistique de l'*October Gallery* de Londres Elisabeth Lalouschek, (voir http://www.rfi.fr/culture/20170331-art-paris-fair-afrique-invite-marie-ann-yemsi-grand-palais, dernier accès 15 juillet 2018) ou parce que des foires leur sont réservées ?

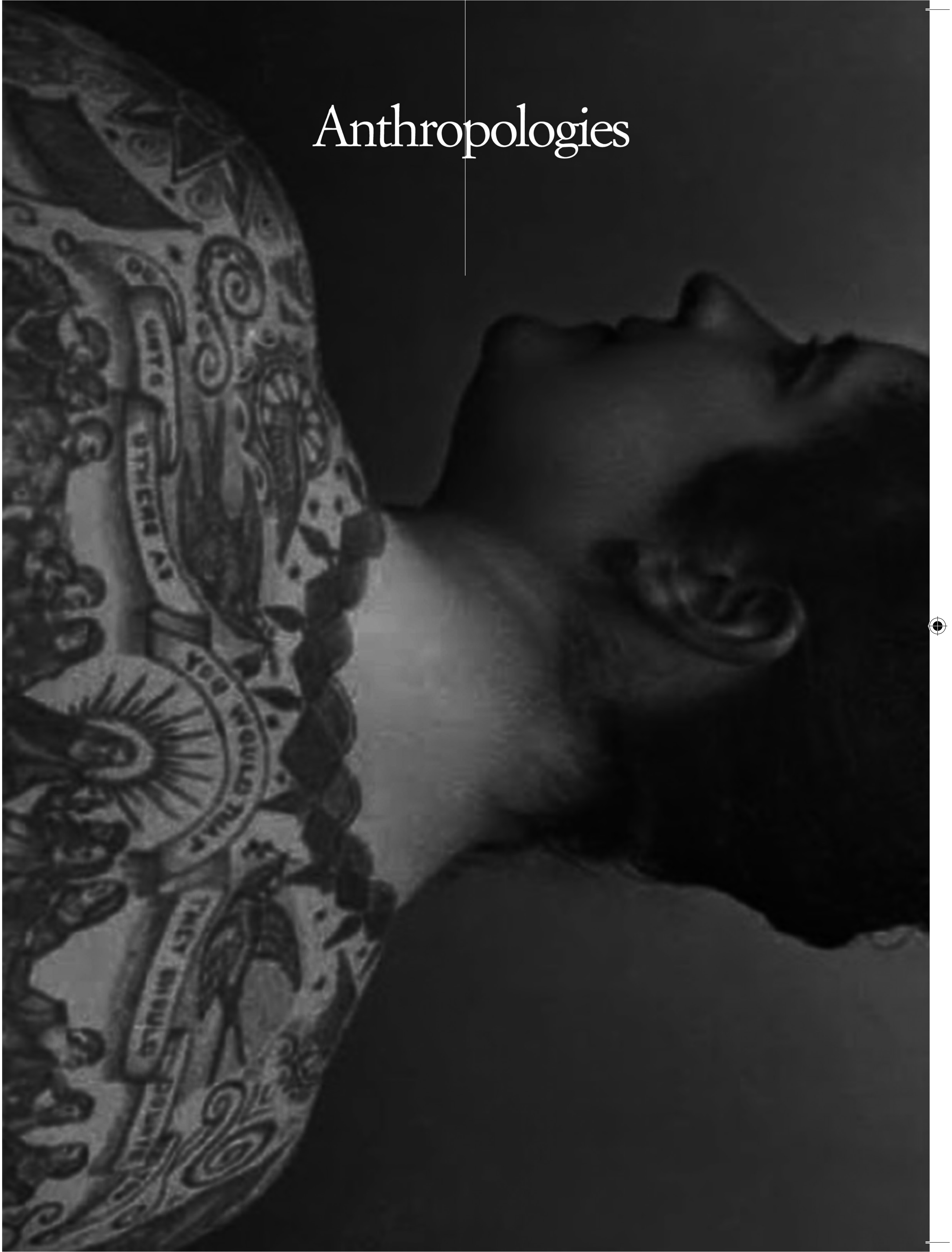
[26] « Il s'agit pour moi d'offrir de nouvelles perspectives sur le continent africain. En France, on a accumulé un retard sur le regard qu'on porte sur ce continent. On est encore dans une 'exotisation', dans une Afrique plus fantasmée qu'une Afrique réelle. Ces projections, ces idées erronées ou préconçues rejaillissent aussi sur les artistes contemporains du continent africain ». (http://www.rfi.fr/culture/20170331-art-paris-fair-afrique-invite-marie-ann-yemsi-grand-palais, dernier accès 15 juillet 2018).

[27] Dana Rush, « Trans Suds. Imaginaires de 'l'Inde' dans l'art, la pratique et la pensée vodun d'Afrique de l'Ouest », trad. fr. Marie Brossier dans *Politique Africaine*, n° 113, Edition Karthala, 2009, pp. 92-115.



Exposing Bodies and Nature. Anthropologies, Phantasmagories and Archaeologies of the Viewing Dispositive

Anthropologies


UNTO
OTHERS AS
YOU WOULD THAT
THEY SHOULD

Mauro Carbone, Université Jean Moulin Lyon 3

From Screens as Prostheses of Our Body to Our Body as a Quasi-Prosthesis of the Screens?

Toward an anthropology of screens

The present proliferation of the digital screens and their evolution as a wearable technology arises new practical and theoretical urgent questionings apropos of the *relationship between such technologies and our body*. Still, does this kind of relationship constitute an absolute novelty? There are serious reasons to think it does not. Such reasons go so far as to suggest that to explore what those relationships were like in the past is a decisive step in order to reflect on the ones that are establishing in the present or profiling in the future.

Indeed, the experience of screens understood in a generic way – the experience of the *screen function* – is a transhistorical one, that is to say, an experience that crosses the prehistory and history of humanity, of course assuming multiple configurations. For this reason, it seems to me that the attempts to trace its genealogical paths cannot be disjointed from the effort to elaborate what I would name an *anthropology of screens*, or, even better, an *anthropology of screen-function experiences.*

In highlighting the need for it, I think it is important to recall what, already several years ago, urged Hans Belting to propose, for his part, an "anthropology of images,"[1] and a consequent "iconology" aiming, as he wrote, at "bridging past and present in the life of the images," so as to avoid "an archaeology of images whose meaning no longer applies to contemporary experience."[2] In fact, when not conceived in such an anthropological perspective, the "archaeology" risks to remain a sterile form of erudition, possibly garnished with a collectors affectation, as shown by several examples in the domain of the so-called *screenology.*[3] However, even "genealogy" risks to condemn itself to remain within narrow horizons, as it happens in the case of the "Screen's Genealogy" proposed by Lev Manovich in his *The Language of New Media*, which only goes back so far as the Albertian window.[4]

Vice versa, my proposal is to conceive such an anthropology as the exploration of the prehistorical and historical variations that intervened in the human culture and configured our relations to screens – understood as surfaces, at once, of showing and concealing – accordingly.

I think that the elaboration of an anthropology of screens can be favored by the heuristic feature of what I propose to define as "arche-screen," which seems to be outlined precisely *in the mutual process of differentiation* of the various historical and cultural configurations assumed by the human experience of screens. In fact, the "arche-screen" has to be understood as one would understand a (musical) theme – or, according to the meaning of the Greek term *archē*, a "principle" – which however, far from giving itself *in the beginning*, does not cease to shape and reshape itself with and through its pre-historical and historical variations. As such, case by case, it will be unconsciously *retro-jected as if it were* a principle given in the "beginning," but at the same time it will articulate in different ways its character of surface that shows and conceals at once. In other words, the "arche-screen" has to be understood as a transhistorical principle of *showing and concealing*, namely a principle of visibility instituted by the power that is inherent to screens, that is, the power of *making visible and, at the same time, making invisible*; a power allowing screens to *present figure*[5] *or images* in a direct, indirect, and even negative way.[6]

Hence, the principle I just described was not given in the *beginning.* Rather, what, in *retrospect*, we can say was given since then, is the *ambiguous* human experience of the body understood as viewing and visible at once, which, as such, can intercept a source of light and hence *show itself to other seers* by *concealing, at the same time,* what is immediately behind it. In short: the body projects its shadow on a surface that, in turn, shows us the shadow itself. Hence, two screens are needed to see a shadow – a "negative screen" casting it and a "positive" one presenting it. Thus, by means of the shadow experience, the *ambiguity of the body prolongs itself in the ambiguity of the screen*, hence opening the screen function to the range of its possibilities, which Gilbert Simondon would qualify as "techno-aesthetic."[7] More particularly, this opens to the conception of *screens understood as prostheses of the body*, in the specific sense of artifacts that enhance some bodily skills, like the capacity of making shadows, by exteriorizing them and, at the same time, invest them in shaping our sensible relation with the world, which, in this sense, ends up configuring itself as an *originarily* techno-aesthetic relation.

Screens as prostheses of our body

The shadow and the skin

First of all, it is important to stress the *status of the shadow as the proto-image*. Such a status has been repeatedly affirmed in the Western seminal texts on this topic. This is the case of the Allegory of the Cave, in which Plato describes the initiation of a prisoner dragged from the cave into sunlight as follows: "at first (*proton*) he would most easily discern the shadows (*skias*) and, after that, the likenesses (*eidola*) or reflections in water."[8] Shortly earlier Plato uses the same terms: "By images (*eidola*) I mean *first* (*proton*) *shadows* (*skias*), and then reflections in water and on surfaces of dense, smooth and bright texture, and everything of that kind."[9]

Precisely from this very status of *the shadow as the proto-image* one can draw that of *the body as the proto-screen*, which, in order to produce images, only needs to be interposed between a luminous source and a surface functioning as a complementary screen. This is what famously allows the daughter of the potter Butades to draw "in outline on the wall the shadow of [her lover's] face thrown by the lamp,"[10] as Pliny the Elder tells in the other seminal Western text about shadow: that is, the tale of the mythical origin of painting and sculpture.

In my book titled *Philosophie-écrans*[11] I highlight that Plato, once again in his Allegory of the Cave, describes the complementary effects of *two screens*: on the one hand, the wall on which the shadows are projected, and on the other hand, the low wall concealing the people carrying the various objects whose shadows are projected on the former wall. Thus, in his Allegory of the Cave, Plato introduces the two fundamental possibilities of what I propose to define as the "arche-screen," namely, the condition of possibility of the screen as a concealing surface and that of the screen as a showing surface, none of which can be merely opposed or separated from the other, neither from a historical nor from a logical point of view.

Concerning the body as the proto-screen, it is important to also point out that the French prehistoric art specialist Michel Lorblanchet evokes the resort to "*hands used as a screen* directing the pigment in the making of" certain prehistoric parietal images executed "by means of the *crachis* technique."[12] In other words, hands were used to protect the portions of a rocky wall that should not be touched by the mouth-thrown pigment.

Lorblanchet adds that this technique was usually accompanied by "the use of a hide (or leather) screen previously pierced in the center," and observes that it "probably allows a higher precision than the screen-hand."[13] It could hence be claimed that a screen of that kind would work as a sort of *prosthesis* (still in the aforementioned sense) of the "screen-hand" itself.

It is also important to remark that the screen used in this case would be made of "hide or leather." This of course points out the path concerning the *prosthesization of the skin* as one of the forms of prosthesization that the human body assumed since prehistory. This is an absolutely central path for our general topic. Marshall McLuhan himself recalls the nature of clothing "as an extension of our skin."[14] The etymology of the Greek word πέπλος, which designates all fabric serving to covering up, also precisely refers to that path. Indeed, such a word comes from the Proto-Indo-European root *pel-, and is linked to the Anglo-Saxon *filmen*, both meaning *skin*: in other terms, precisely "hide or leather." This path hence leads to screen-forms like the tent, the curtain, and, in particular, the veil.

However, also the etymological traces of another vector of prosthetic externalization of corporeity lead to the semantic area in which gravitate the aforementioned terms. It is a vector once again evoking the shadow experience. Indeed, we should not forget that the ancient Greek word for "shadow" has the same root of the term σκηνή, meaning *tent*, in particular the tent *screening* the backstage preparation of the actors in the classical Greek theater. Even more interestingly, we should not forget that the word σκηνή is linked to the term σκήνος, meaning the body itself in a figured sense, that is, as the soul's *envelop*.

Thus, both the myth of the origin of painting from shadow and all these philological relations suggest a dynamics of *detachment* of the shadow and the skin with respect to the body.

On this topic, it should also be remarked that if two screens are needed in order to make a shadow – as we observed before –, this structural ambiguity of the screens seems to find a primordial and peculiar evidence in the uses of the skin as a screen. Indeed, if earlier we heard Lorblanchet mention the use of skin in the production of a screen that can be qualified as "negative" – meaning that it stops what collides with it and hence prevents the colliding element from reaching what is behind it –, another very relevant cultural phenomenon, that of tattoos, presents the body skin as a "positive" screen, meaning that it exhibits what is situated on its surface. [15] In its double function of negative and positive screen, the skin hence reveals itself to be a *pars pro toto* (*part for the whole*) of the body as the proto-screen.

In any case, the aforementioned ambiguity of the arche-screen is confirmed in being already rooted in the body understood as the proto-screen both in a negative and in a positive way.

The veil

In human culture, the veil can be considered as one of the most significant historical examples of the aforementioned notion of arche-screen and of its *ambiguity* of showing and concealing at once. Indeed, the veil has an absolutely central position in the development of the screen forms. The multiple cultural histories of the veil explored the ambiguity of the arche-screen in innumerable ways. A particularly iconic inflection of such an ambiguity consists in *showing by concealing*, and probably finds its most moving artistic celebration in the *Cristo velato* (*Veiled Christ*) sculpted by Giuseppe Sanmartino in 1753 and preserved in the Cappella Sansevero, Naples.

Of course, here there is no room to focus on the details of this or that history of the veil picked from the multitude. Other scholars did it, sometimes most remarkably, like in the case of Pierre Hadot's book devoted to the veil of the Egyptian goddess Isis, namely, to the mythical *peplos* of Mother Nature, which no mortal was said to have raised.[16] Nevertheless, here I would like to recall at least the path leading from the Jewish Tabernacle to Leon Battista Alberti's "intersection" – though it has already been explored by the French literature theorist Stéphane Lojkine[17] – so as to observe the persistency of certain features traceable in that path in the cinematic screen and the digital display experiences.

As it is well-known, in his treatise titled *On Painting* (*De Pictura*, 1435),[18] on the one hand, Alberti established the *window* as the optical apparatus taken on as the model of the painting surface (see Book One, §19). Yet, on the other hand, he suggested to paint by using what he considered to be an invention of his own, namely a *veil* featuring a grid of squares, which he also called *intersection* (see Book Two, §31), and which was meant to be put between the painter and the observed scene, in order to represent it as accurately as possible. (fig. 50) Alberti's description of this veil brings us back to another *crucial* veil in our culture, in virtue of some similar characters as well as of several opposed features.

The veil I am talking about is the one that can be found inside the Jewish Tabernacle, whose shape, size, and furbishments are minutely described in the Bible, *Exodus*, 25-31 and 38-40.

Such a tabernacle (usually named by the Jewish word *ohel*, in turn meaning *tent*) was the Jewish's portable sanctuary during their wandering in the desert and in the first stages of their stay in Palestine, until Salomon built the Temple of Jerusalem. In relation with the topic we are examining here, it is particularly important to point out, as Lojkine also does, that in the *Septuagint*, i.e., the primary Greek translation of the Old Testament, the Jewish Tabernacle is designated by the word σκήνη (*Exodus*, 26:1), to whose etymology I made allusion above.

The sacred tent was considered to be the "home" to Jahveh, God of Israel. It consisted of a roofed space in which two parts were delimited by a linen veil (named by the *Septuagint* καταπέτασμα, also meaning curtain or tent) embroidered with Cherubim (fig. 51). The front part was called the "Holy," and it was the public space. The innermost part was called the "Holy of Holies," and its access was limited to the priests. It was here that was kept the Ark of the Covenant, containing the two stone tablets of the Ten Commandments, the Second of which said that no image should be produced by humans: "Thou shalt not make unto thee a graven image, nor any likeness of any thing that is in heaven above, or that is in the earth beneath, or that is in the water under the earth" (*Exodus*, 20:4).

Thus, as the Father of the Church Saint John of Damascus and the Doctor of the Church Bede the Venerable already pointed out in the first half of the 8th century, the veil bearing the embroidered Cherubim was the one and only image permitted by the Old Testament.

On this subject, as far as Christianism itself is concerned, everybody acknowledges the turning role of the Second Council of Nicaea (787), which was summoned by the Byzantine Empress Irene of Athens against the iconoclasts. The Council established the legality of the veneration of holy images understood as veneration of their prototypes, for the main doctrinal reason according to which the incarnated Son himself is the image of the Father.

What happens then, in the Christian iconography, to the veil embroidered with Cherubim images, which used to split in two parts the inside of the Jewish Tabernacle? The Byzantin iconophile reasoning will not spread in the West before the 12th century. Meanwhile, in the West itself a reflection is developed, which engages in the defence of sacred images. However, unlike the Byzantine reflection, the Western reflection assimilates the status of sacred images to that of the Holy Scriptures. Indeed, for the Christians the Scriptures include the New Testament, which, by announcing the coming of Christ, symbolically opens the Holy of Holies to the congregation. An iconic example from the 8th century can be found in England: it's a miniature from the Stockholm Codex Aureus depicting one of the Evangelists: Saint Matthew. In this miniature, the structure of the Tabernacle becomes the frame of the image, and the veil, no longer meant to establish a separation, is meaningfully split and spread (fig. 52). Successively, this veil will assume an increasingly scenic function, and is sometimes reduced to a canopy rising above the *wide open scene*.

This opening feature will explicitly be back in Lean Battista Alberti's window. However, in its own way it will invest also Alberti's characterization of the veil:

> *a veil loosely woven of fine thread, dyed whatever colour you please, divided up by thicker threads into as many parallel square sections as you like, and stretched on a frame. I set this up between the eye and the object to be represented, so that the visual pyramid passes through the loose weave of the veil.*[19]

The Albertian veil, without the Cherubim images that were embroidered on the Biblical veil, hence acquires an acknowledged and legitimated *transparency* (in the etymological meaning of the term), which allows the painter's gaze to cross it. On the other hand, of course such a transparency is inseparable from the grid of parallel lines that it permits to highlight – a grid which, in turn, allows the geometrization of vision and hence a more precise transposition of the vision itself to the bi-dimensional pictorial surface. In this sense, if the veil now *makes seen* what is on the other side of it, this happens because it is invested with a scientific function and connotation. It is also important to remark that this idea of a geometrical decomposition-recomposition of three-dimensional space onto the bi-dimensionality of the image is still at work in the pixelization of the latter on the digital screens, even if they no longer reveal the other side of their surface.

Hence, Alberti's veil recalls the veil of the Jewish Tabernacle mainly because it is situated, as we read above, as an "interection" with respect to the viewer. Nevertheless, it has to be remarked that at least two decisive changes seem to have occurred. On the one hand, as I already suggested, with respect to the Jewish veil, the Albertian veil looks to have taken advantage of the iconophilia established by Christian theology. On the other hand, by placing the veil between the painter and the visible that he is bound to observe, Alberti "radically secularizes" such a veil, and inaugurates a new status for it, as Lojkine points out.[20]

Of course, this new status will come across many, autonomous developments.[21] Amid them, we can mention the cinematic screen, with its texture and peculiar position, as well as today's digital displays. However, it is important to highlight that this new status will not be enough to completely cancel, from our relations with such screens and with the images they present, the echo of the sacred feature embodied by their direct ascendants as well as by others, such as the *templum*, which I examined in *Philosophie-écrans*.[22] We owe also to this echo of a sacred feature, on the one hand, the pretension of attention and of acknowledgment of their veracity, which the screens and their images never cease to address us, and, on the other hand, the credit we tend to give them. The strategy of "seduction" – as I qualified it – that the various screen-forms perform on us is indeed inseparable from these elements. According to Lojkine, in the Christian-based culture, such a strategy has to do with that "breaking"[23] of the prohibition concerning images which is inevitably implied in the opening of the veil in the act of their presentation, or in its becoming transparent.

*The film or "*pellicule*"*

The philological bounds among *péplos*, *pel-*, and *filmen* I evoked at the end of the first paragraph of this section suggest that it is possible to trace a further drift of the prosthetization of the body as the proto-screen even in analogical cinema. In fact, in this kind of cinema we can still find the negative/positive double screen structure. But there is more to it: what I defined above as the "negative screen" of this structure – which, like the body, is interposed between the luminous source and the showing surface – is significantly called *film* and in French, analogously, "*pellicule*," namely, as Jean-François Lyotard reminded us, "*petite peau.*"[24] For sure, this cinematic-oriented connection between the words "skin" and "film" or "*pellicule*" is very meaningful and rich of implications. Nevertheless, it remains surprisingly unexplored both by Lyotard, and by Laura U. Marks in her book titled *The Skin of the Film.*[25]

Still, in a way, this progressive exteriorization of the body understood as proto-screen probably gets to a limit precisely with the end of analogical cinema, namely with the disappearing of "the raw film." Indeed, as David Rodowick resumed already over ten years ago,

> *The analogical arts are fundamentally arts of intaglio, or worked matter – a literal sculpting by light of hills and valleys in the raw film whose variable density produces a visible image. But the transformation of matter in the electronic and digital arts takes place on a different atomic register and in a different conceptual domain.*[26]

Inevitably, this trend announces a new status not only of the images, but of the screen itself.

Are our vision-centred bodily organs going to become quasi-prostheses of the screens?

It looks like the process described above is a part of the wider "exosomatic"[27] dynamics that our evolution appears to have outlined by means of technology, which has to be understood as a progressive "exteriorization" (Leroi-Gourhan[28]) or "outering" (McLuhan[29]) of the skills that are primarily rooted in the human body. Moreover, McLuhan claimed that his epoch was "moving toward the technological extension of the consciousness."[30] From this standpoint, one can argue that, starting with the digital revolution, such an externalization "of the consciousness" process is powerfully developing. Yet, this very process seems to be intersected by a trend *internalization* of the technology. By this expression I do not simply mean the implantation, within our body, of prostheses aiming at *enhancing* and even *altering* the human potentialities.[31] I also mean the complementary tendency consisting in the increasingly intrusive and binding use of our bodily organs as some sorts of components of technological artifacts, and, more particularly, digital ones. It is on this latter process that I shall now focus my attention.

Concerning in particular the digital devices focused on vision, such a tendency was anticipated by *Google Glass*, namely, the well-known augmented-reality spectacles whose production was interrupted in 2015, an "Enterprise edition" of which, also called *Google Glass 2*, was announced in July 2017. The patent, published in 2013, qualifies *Google Glass* as a "Heads-up display including eye tracking," and describes such devices as follows:

> *Heads-up displays allow a user to view a scene while relevant information is overlaid on the scene, so that the user looking through the heads-up display simultaneously sees both the scene and the relevant information. For example, a pilot looking through a heads-up display while landing an airplane simultaneously sees the airport ahead (the scene) through the heads-up display while the heads-up display projects information such as speed, heading and altitude (the relevant information) that the pilot needs to land the plane.*[32]

This kind of devices implies a "prism lens" named "prism-patterned screen." Despite such a name, Marta Nijhuis has appropriately made clear that

> *this prism does not work like an average display, neither, properly speaking, like a screen. […] The image is indeed projected (by a mini-device placed on the side of the camera [that is installed in the Glass, N.d.A.]). However, instead of welcoming the image on its surface, the crystal implements its refractive – and hence deviating – feature, so as to redirect the projector's luminous beam toward our eye, and hence finding its screen directly on our retina. The screen of Glass is thus not the prism. The screen is our eye. No wonder that this technology is also called Virtual Retinal Display. And it is precisely because our eye is the screen that we can focus the information transmitted by Glass as if they were an integral part of reality.*[33]

In fact, even if *Google Glass* implies a *physical* display – more precisely, a *near eye display* –, the vision it produces does not take place on that display, which is *too close* to our eye for us to be able to perceive such a vision. *Google Glass* hence exploits a retinal-projection-based technology, which addresses the shaping of the images directly toward the user's retina. This, however, does not imply the disappearing of the screen understood as the image's necessary background and hence as the condition of its visibility. On the contrary, as it was explained in 2015 in the *Human-Machine Interaction Review*, "The user perceives a small translucent screen hovering at about arm's length, extended up and outward from the right eye."[34] In short, to get back to the terms of what we read earlier, a screen named *Virtual Retinal Display* (VRD) is formed on our retina (fig. 53),[35] hence reproducing, by a sort of perceptual illusion, the conditions that allow vision and, in this sense, making the retina itself become a "quasi-prosthesis," which literally replaces an otherwise compromised functionality. In this case, however, it is the functionality of a component of the heads-up display, which the retina *replaces* or prosthetizes, that is, the functionality which the display itself would be expected to provide. Besides, the use of such functionality confirms the pertinence of the notion of "arche-screen."

As I wrote earlier, I propose to qualify as "quasi-prostheses" the bodily organs that are involved in processes like the one I just described. Indeed, this characterization aims at pointing out such organs' *peculiarly ambiguous* status. In fact, on the one hand, they are actual bodily organs, and in this sense they are expected to keep an organic relation with the whole body, even during such processes. Yet, on the other hand, they are used as components of connected digital apparatuses aiming at strengthening our potentialities, first of all our bodily skills.

In this sense, if Leroi-Gourhan and McLuhan, on the basis of their own theories concerning prostheses as externalizations, wonder whether such prostheses will finally *replace* our body, what I am suggesting is rather that our bodily organs could be reshaped as "quasi-prostheses" of various digital apparatuses. More particularly, speaking about vision-centred digital apparatuses, it is inevitable to suggest that our related bodily organs could be reshaped as "quasi-prostheses" of those apparatuses' main interfaces, namely screens.

(Translation by Marta Nijhuis)

Illustrations

50. Leon Battista Alberti's veil (*De Pictura*, 1435).
51. A map of the Tabernacle, Jewish's sacred tent: a roofed space delimited by a linen veil embroidered with Cherubim.
52. A miniature from the Stockholm Codex Aureus depicting Saint Matthew (England, 8th century).
53. A graphic representation of the *Virtual Retinal Display* (VRD).

Notes

[1] Hans Belting, *An Anthropology of Images: Picture, Medium, Body* [2001], translated by Thomas Dunlap, Princeton University Press, Princeton-Oxford 2011.

[2] Hans Belting, "Image, Medium, Body: A New Approach to Iconology," in *Critical Inquiry*, vol. 31, no. 2, Winter 2005, p. 303.

[3] Erkki Huhtamo, "Elements of Screenology: Toward and Archaeology of the Screen," in *ICONICS: International Studies of Modern Image*, vol. 7, 2004, pp. 31-82.

[4] See Lev Manovich, *The Language of New Media*, The MIT Press, Cambridge (MA) 2000, p. 99ff.

[5] Here and hereafter I use the word "figure" in the non-representative acceptation thematized by Jean-François Lyotard through the notion of "Figural." See his *Discours, Figure*, Klincksieck, Paris 1971, trans. Anthony Hudek and Mary Lydon, *Discourse, Figure*, University of Minnesota Press, Minneapolis 2011.

[6] Thus happens when, by concealing the visible, one ends up magnifying it.

[7] See Gilbert Simondon, "Sur la techno-esthétique" (dated 3 July 1982), in *Sur la technique (1953-1983)*, P.U.F., Paris 2014, pp. 391-392.

[8] Plato, *The Republic*, trans. Paul Shorey, "Loeb Classical Library," Harvard University Press, Cambridge (MA) 1935, 516a.

[9] *Idem*, pp. 509e-510a, my emphases.

[10] See G. Plinius Secundus, *Naturalis Historia*, Liber XXXV, § 151, trans. Harris Rackman, *Natural History*, "Loeb Classical Library," Harvard University Press, Cambridge (MA) 1938-1952, p. 43.

[11] *Philosophie-écrans. Du cinéma à la révolution numérique*, Vrin, Paris 2016, trans. Marta Nijhuis, *Philosophy-Screens: From Cinema to the Digital Revolution*, SUNY Press, Albany 2019, forthcoming.

[12] Michel Lorblanchet, *Art pariétal. Grottes ornées du Quercy*, Éditions du Rouergue, Rodez 2010, p. 114, my emphases.

[13] *Idem*, p. 116.

[14] Marshall McLuhan, *Understanding Media. The Extensions of Man*, McGraw-Hill, New York-Toronto-London 1964, p. 134.

[15] See Barbara Grespi's unpublished paper titled *Gestures of Hands and Cinema Archaeology* and presented at the NECS 2017 Paris Conference: "For instance, the function of tattoo in primitive culture, especially Maori culture, the homeland of body painting, and also the place where the word tattoo originated. Tattoo is an image drawn on a mobile surface; it is already a moving image, often situated in those parts of the body where the muscular contraction is more frequent and the dynamic effect more evident; the gestures of a tattooed body are mechanisms for animating pictures." (I thank Barbara Grespi for allowing me to read and quote her unpublished text).

[16] Pierre Hadot, *Le Voile d'Isis. Essai sur l'histoire de l'idée de Nature*, Gallimard, Paris 2004, trans. Michael Chase, *The Veil of Isis. An Essay on the History of the Idea of Nature*, Harvard University Press, Cambridge (MA) 2006, p. 252.

[17] See Stéphane Lojkine, "De l'allégorie à la scène: la Vierge-tabernacle," in Brigitte Pérez-Jean, Patricia Eichel-Lojkine (eds.), *L'Allégorie de l'Antiquité à la Renaissance*, Champion, Paris 2004, pp. 509-531.

[18] See Leon Battista Alberti, *On Painting and On Sculpture*, trans. Cecil Grayson, Phaidon, London 1972.

[19] *Idem*, p. 69.

[20] See Stéphane Lojkine, http://utpictura18.univ-montp3.fr/GenerateurTexte.php?numero=22, last visit 12 December 2018.

[21] Among them, let me recall at least that, by 1743, the naturalist and Member of the London Royal Society, Henry Baker, in his *The Microscope Made Easy,* uses the word *screen* to designate a surface whose characteristics and functions are in many ways similar to those of the Albertian veil.

[22] Mauro Carbone, *Philosophie-écrans*, cit., p. 103ff.

[23] See Stéphane Lojkine, "De l'allégorie à la scène: la Vierge-tabernacle," in Brigitte Pérez-Jean, Patricia Eichel-Lojkine (eds.), *L'Allégorie de l'Antiquité à la Renaissance*, cit.

[24] Jean-François Lyotard, "Acinema," trans. Paisley N. Livingstone and the author, *Wide Angle*, 2, n. 3 [1978], p. 57. Originally published in *Revue d'esthétique*, 26, nos. 2-4 [1973], pp. 357-369.

[25] Laura U. Marks, *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses*, Duke University Press, Durham (NC) 2000.

[26] D. N. Rodowick, *The Virtual Life of Film*, Harvard University Press, Cambridge (MA) 2007, p. 9.

[27] See A. J. Lotka, *Elements of physical biology*, Williams and Wilkins Company, Baltimore 1925.

[28] A. Leroi-Gourhan, *Le geste et la parole*, Albin Michel, Paris 1964-1965, 2 vols.

[29] Marshall McLuhan, *Understanding Media. The Extensions of Man*, cit.

[30] *Idem*, p. 69.

[31] See Thierry Hoquet, *Cyborg Philosophie: Penser contre les dualismes*, Seuil, Paris 2011, p. 344.

[32] Andrew J. Ouderkirk (inventor), *Head mounted display with eye tracking*, Google Glass Patent Application Publication, US 2013/0207887 A1, Aug. 15, 2013, p. 1.

[33] See Marta Nijhuis, "Vous avez dit *écrans*? Entre miroir et voile, le voile prismatique," in M. Carbone, A.C. Dalmasso, J. Bodini (eds.), *Vivre par(mi) les écrans*, Les presses du réel, Dijon 2016, p. 127.

[34] Eeva Järvenpää, Changizi Alireza (main authors), "Human-Machine Interaction – Theory and Technologies," in *Human-Machine Interaction Review*, 2015, p. 44.

[35] See https://www.quora.com/How-does-Google-Glass-project-the-image-onto-the-glass, last visit 12 December 2018.

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Wearing the Image in Motion: Tattoos as Cinema Archaeology?

The following article is part of my research on the body as the primeval site in which the imaginary of technology, and precisely the idea of the image in motion, is elaborated. Its specific subject is the role of skin both as a surface of inscription of images, a place where images are publicly exposed, and as a material or medium which allows their animation. The practice of tattooing – which is not a drawing on the human surface, but corresponds to an art suspended halfway between painting and carving – is perhaps the highest expression of this function of the skin, of its transformation in an instrument through which memories, reflections of your own body's interior, purposes and passions are visualized. The use of tattooing spread in Western culture at the end of the 19th century, intersecting with pre-cinema and in general with the history of old media; concerning just the Italian context, largely monitored by the anthropologist Cesare Lombroso, different documentary sources draw attention on it, fostering an analysis of the relationship between tattooing and cinema.

Expositions of the human

1885: the first international congress on criminal anthropology opens in Rome, with the school of Cesare Lombroso on top. An exhibition at Palazzo di Belle Arti is connected with the congress, mostly addressed to experts but also open to the general public, except women and children. On the walls of this location devoted to art, alongside skulls, brains, photos of deviants, anthropometries of all sorts, diagrams and charts of crime data, as well as the famous composite photographs of Francis Galton, a selection of criminals' tattoos is presented and exhibited in different ways. First through framed organic exhibits, including skin fragments that Cesare Lombroso himself had peeled off the corpses of convicts, sailors, and deserters, or had received from the criminologists he was in contact with (the representatives of the French school and some Italian colleagues, such as Angiolo Filippi, a former dissector and then professor of forensic medicine in Florence). Second, the tattooing room included paintings of Alexandre Lacassaigne, an anthropologist from Lyon who, at that time, collected and studied the convicts' tattoos, and, for the occasion, had carried to Rome his collection (unfortunately no longer in existence) of two thousand live reproductions signed by different illustrators; lastly, tattoos came up in sketches by Luigi Frigerio, retraced on tissue paper directly from the skin of the inmates of the asylum in Alessandria (managed by Frigerio) and the prison in the same city.[1]

Four years later, that section of the exhibition was set up again in the pavilion of Anthropology of the Universal Exposition in Paris (1889), also upon the initiative of Lombroso and Frigerio. However, this time the skin-images were shown together with the bodies wearing them, both because of an evolution in Lombroso's perspective on the subject, and because they were not aimed at selected and specialized viewers, but rather at a large and composite audience. The huge colour panels representing the full-length figure of the inmates literally covered in drawings and writings (fig. 54) were clearly a spectacular approach to this phenomenon, and were used to impress the idea that tattooed men were criminals in the collective imaginary, thus strengthening the Lombrosian principle of atavism (according to which tattoos are a sign of deviance, in that they represent the recurrence of primitive drives in modern man). Nonetheless, the painstaking collection, transcription, commenting and, most of all, the graphic and photographic depiction work that Lombroso carried out between 1880 and 1907 conveys a more general interest, an attraction that goes beyond a mere demonstration of a scientific thesis and reveals a more unconscious and deep fascination, in line with the spirit of time.

After the shocking encounter with the tattooed inhabitants of the Pacific Islands first visited by Western explorers in the mid-18th century, the 19th century saw the revival of tattooing, which was finally metabolised and started to appear on the bodies of sailors, soldiers, and convicts (fig. 55).[2] Nevertheless, these historical data do not fully account for the close and persistent focus of science and culture on tattoos between 1880 and 1920. At the turn of these two centuries, at least fifteen books were published on the subject in Europe, almost seventy articles just in *Archives*, the main criminal anthropology journal which received drawings and photos of tattoos from Europe and Argentina, but also scraps of human skin resected from corpses, pinned to wooden tablets or stored in glass containers. This proves that Lombroso's interest was largely shared, in a systematic manner especially in Spain (with Rafael Salillas) and France (with the already mentioned Lacassaigne, and also with Émile Magitot). Moreover, while anthropologists were concentrating on the link between tattooing and deviance, the practice spread to other strata of society, and, at the same time, the tattooist began to be recognized as an artist; in New York, James O'Reilly became a star; in 1891, he patented his electric tattooing machine, with which he was able to create extensive tattoos in a faster way, thus establishing a new profession: that of total tattooed bodies performing as circus attractions. Spouses Emma and Frank De Burgh belonged to his gallery of curious characters: they had tattoos on the whole torso and back and travelled throughout Europe in order to expose themselves as works of art, especially Emma's back, on which a version of *The Last Supper* by Leonardo da Vinci could be admired (fig. 56).[3]

Emma's leonardesque tattoo intrigued also the pre-Raphaelite painter Edward Burne-Jones, who drew some sketches of the woman's body after her performance at the London Aquarium, and was particularly interested in the modification of the tattooed figures according to Emma's variation of weight.[4]

In the United Kingdom, some vaguely transgressive middle-class women relied on the work of renowned tattoo artists based in London, such as the master Sutherland Mcdonald, and legend has it that even many royal bloodline aristocrats did the same, including King Henry VII.

Therefore, one could say that at the end of the 19th century tattoos were fashionable, and this is not surprising. Despite their primitive character and their ancient roots, tattoos were probably recognized as a practice addressing modern culture, or at least concerning one key problem of the visible of the 20th century, namely, the relation between image and body, which would soon be at the heart of chronophotography, cinema, and X-rays. As a primeval and original solution to this problem, tattoos mostly appeal to a culture that is designing new techniques to visualize man and his dynamic essence. In the practice of tattooing, the human body is recognized as the origin of images, and its biological mechanics as their animating force.

The body as an optical toy

Let's get to the heart of the Lombroso Archive, to take a look at the many visual documents stored there and to analyse their archiving criteria. In this corpus, the anthropologist's approach appears more acute than in his writings on the subject (it should be noted, however, that in the last phase his method of work was mixed with that of his collaborators, like Mario Carrara, who took over the management of the Museum and continued to document tattoos until the 1920s, mostly using photography).[5] If it is true that in *L'uomo delinquente* Lombroso actually considers tattoos as such,[6] regardless of their position on the body, if it is true that he makes the mistake of reducing them to mere images and writings to be classified by topics and interpreted as mere symbols, it is also true that in collecting materials he actually understands the important connection between body and image: he keeps track of the most spectacular tattoos and pays special attention to those placed on intimate parts. Lombroso preserves a postcard depicting a female body entirely covered with symbols and graphics (fig. 57) (it is the portrait of Djita, the "Tattooed Oriental Beauty" of the American circus, one of the first entirely tattooed women whose skin decoration counted no fewer than fifteen colours); he captures from different angles several human backs on which true tragedies unfold such as a forced evasion complete with three mental images (of the fainted convict) placed on the upper part as some sort of flashback (fig. 58), and a scene of courtship, built according to the theatrical code, but also endowed with memorial or mental "superimpositions" (fig. 59). Elsewhere, he reports on tattoos that reassemble the body by moving some of its organs, especially by placing the face in other parts of the body: knees and buttocks as eyes, as well as some genital parts (fig. 60). Lastly, he focuses on backs crossed by dragons or angels with their wings outstretched, or even occupied by a snake that literally runs along the spine and wraps up the body on both sides (fig. 61). While Lombroso does not comment on these images, he does not even dream of cutting out and pasting them onto some board, as he had done with many other plain and isolated tattoos: this means that he does not ignore the fact that these images only make sense on and in a body. Actually, not only on a body, but on a *living* body, i.e. through the body movements that bring images to life by both exposing them and making them move (the angel's flapping wings, the dragon's or the snake's coils gliding on the skin). We find one more of these screen-backs (or arche-screen)[7] in Scorsese's version of the convict, Robert De Niro's character in *Cape Fear* (Martin Scorsese 1991), who wears a tattooed scale on his shoulder blades and makes the weighing plates (Truth and Justice) move up and down when doing push-ups (fig. 62). Scorsese captures the approach to surfaces in prisons, and connects De Niro's skin with his cell's walls, i.e. uses his skin as a new white wall on which sacred or sexy images can be displayed except that, in this case, the tattooed figures move.

Animated tattoos are of particular interest, first because they seem to represent the Western historical interpretation of tattooing as it was practised in the Pacific Islands (whose extension, but not the main graphic character, is borrowed) and, second, because they can be seen as a pre-cinematographic effort – parallel to that of different optical machines – to conceive and produce images in motion.

The idea that tattoos in motion represent the modern and Western interpretation of an ancient phenomenon seems to be confirmed by Disney's *Moana* (Ron Clement, John Musker 2016), which introduces this *motif* through the character of Maui, a Polynesian demi-god. In the local myth, Maui's body was actually covered with images on every inch of skin, but these extensive tattoos were magical only because of their connection with the deities who had "touched" and saved him: they were metaphors of a life designed by the gods. The modern interpretation resurfaces in Disney's movie: the polymorphic demi-god presents on his body true film strips that run now and then, come to life and tell his story through a small-sized alter ego. By jumping from a muscle to the other, the mini-Maui displays the key moments of his legendary life and, in most cases, his famous deeds; meanwhile, our look scrutinizes the cartoons, from left to right, as in a secondary comic strip; significantly, this cartoon *en abyme* had to be hand-drawn in order to be enclosed in a digitally animated body; once again, and in a very concrete form, tattoos take us back to the origins of cinema, forcing technology to take a step backwards (fig. 63).

According to many accounts, from the main essays of Lacassaigne on the *Archives*, to the *reportage* by navy doctor Ernest Berchon, who described tattoos in the Marquesas Islands around 1860, to the books of the Italian anthropologists Cerchiari and De Blasio, both dated at the beginning of the 20th century,[8] the tattooed bodies of the dwellers of the Pacific Islands, though covered with figures and symbols, do not contain images that could be animated through body movements. The turn from abstract to figurative tattooing occurred apparently in Japanese culture, according to the writings of explorer and naturalist Enrico Hiller Giglioli; he remarked that dragons and faces were the favourite subject of Japanese esquires (*betsùto*), and that Japanese tattooists practiced actual "adaptations" of novels into series of tattoos: for example, Giglioli found out that the most important passages of the popular story of the forty-seven *ronin* were illustrated on the chest, arms, legs and back of a groom.[9]

The same for some ideas which seem absolutely contemporary, like those anticipating the so called "cyborg tattoo," which nowadays shows on the surface of the skin the underlying muscles and tendons depicted as steel cables so as to reveal the robotic nature of human being: indeed, projecting the bodily interior on the outside was already common in Australian tattoo style.[10] On the contrary, there is no trace of optical effects related to bodily movement; that's the reason why we suppose that they could be a modern Western interpretation of tattooing elaborated in the wake of Marey's and Muybridge's studies.

I must admit that my search for 19th-century examples of this visual form was quite complicated; in most cases I landed on erotic or porn images that I was inclined to take not too seriously in their "visual mechanics," as probably did most commentators of the time, including Lombroso, who did not omit to reproduce or describe them, albeit only as further evidence of the degenerative character of the practice. The link between images in motion and the porn subject is actually crucial, as Linda Williams claimed in *Hardcore*, her fundamental contribution to porn studies, introducing (on the wake of Foucault) the question of visualizing and controlling sexuality as something that supports the modern interest in the mechanics of body movements.[11] The rough images in motion created by tattoos could be an integral part of the modern "frenzy of the visible," as Williams calls it, based on "an unanticipated pleasure attached to the visual spectacle of lifelike moving bodies" and on the desire "to construct better machine of observation to measure and record bodies now conceived themselves as machines."[12] For instance, the Lombroso Archive contains, among other things, the reproduction of a biceps that shows a naked woman spinning around to exhibit all parts of her body, in normal or obscene positions, when rotating the arm, like in a zoetrope made of flesh; these dynamic tattoos are forms of enhancement of the visible that are produced through technique, but their peculiarity is that they treat the body not only as the subject of visibility, but also as one of these machines of visibility; not too strangely, this sort of tattooing is experienced in the context of detention, where the body is under control and, being deprived of most operational activities, works most of all in translational and symbolic ways, expressing its nature of medium at the highest degree. The erotic finalization of this mobile tattoos seems to weaken when the side effect produced – the image in motion – becomes particularly surprising and more satisfying in term of self-spectacularization. In this perspective, the case of the convict described by Salillas in his *El Tatuaje* (1908) is absolutely convincing, even if paradoxical: this man had a cat tattooed on his glans and a mouse on his prepuce, so that, whenever he used his organ, the first chased the second just as in a basic cartoon scene.[13] This proves that the figures which animate on skin are a pleasure in themselves, at most associated with – but not really aimed at – eroticism.

However, beyond this extreme case – but relevant in showing that the same essential mechanics of the body is at the base of both the sexual act and the dynamism of images – animated tattoos are usually connected with involuntary body movements, even minimal; positioning the figures in points of frequent muscle contraction, like the biceps that causes a flame to vibrate, or the shoulder-blade that shows a flattering wing, is a classic choice among sailors. These minimal units of movement achieved by the complicity between the mechanics of the body and the properties of skin, between the living nature of the human being and the particularities of his surface, are very close to those filmic particles which Umberto Eco called *cinemorphs* – the minimal combination of still images producing a frame, enough to pass from the static figure to movement, from photography to cinema, from pose to gesture. He wrote in 1968: "when moving from still images to a frame, the characters make gestures: through diachronic movement, the icons generate cinemorphs."[14] There is no doubt that this optical effect was experienced through tattooing too, particularly in the lower classes; but it is difficult to say from when and with what relationship with the other pre-cinematic phenomena.[15] Apparently, nobody noted this parallelism at that time, but the idea of a connection between 19th century media and tattooing touched the anthropologist Abele de Blasio, who compared the so called "tattoo of graduation" of the criminals to telegraphic writing: "so one dash and three points signifies *camorrista*, one dash and two points *picciuotto*, one dash and one point '*honoured youngster.*'"[16] This is a ciphered message transmitted through skin.

From tattoos to post-cinematic images

The concrete embodiment of the image in motion is one of the fundamental features of the post-cinematic culture. Virtual Reality and Augmented Reality foster the idea of the total involvement of the body in the production of the filmic object; images are now commonly worn through devices, which are closer and closer to the skin, so that tattooing culture is generically evoked by a series of naturalized technological practices.[17]
In contemporary art, at very different levels, the connection between moving images and tattooing is clearer, especially in the case of body video-mapping, a practice in which the body surface is first made uniform through particular makeup, clothing and hairstyle, and then used as a screen, being hit by projections, which completely alter the body figure.

For example, there are virtual tattoos reproducing typical Maori face decorations: traditional ornaments are projected on the cheeks, eyelids and around the mouth of a model, who stays motionless in front of the audience (figg. 64-65). Usually, these are video theater performances where the makeup artists' intervention is fundamental, in order to transform the skin into a blank page that is devoid of imperfections so that light rays can draw or write on it any sort of artwork. However, in these cases, the precise re-enactment of the imaginary of tattooing is combined with its own negation: indeed, the tattoo as an engraved, non-erasable image, which has become a new skin full of memories, is replaced by the appearance and disappearance of ghostly pictures. What remains is just the idea of the skin as a screen; but this idea can be considered a cyclical emergence at least since the Twenties, when Man Ray created the first installation of moving images in history (a cine-installation): at the Parisian White Ball given by the Count and Countess Pecci-Blunt, he projected an ancient hand-painted movie by Méliès on the white bodies of the guests dancing in the garden (he placed the projector in a room whose windows overlooked the dance floor). The fact that, in his *memoirs*, Man Ray noted that the movie was hand-painted,[18] allow us to think that the idea of covering bodies with drawings in motion was not so foreign to the artist. In 1975, another fundamental work of art brought to light the same question: *Intellettuale* by Fabio Mauri, who projected *Il Vangelo secondo Matteo* (1964) on the white shirt of Pier Paolo Pasolini, immobilized on a chair; the work is full of meaning (also connected with the historical contingencies, the specific story narrated in the film and the biography of Pasolini), but the artistic gesture of Mauri might also be seen as tattooing the movie on the mystic body of its own creator, etching its images on his flesh.

In some contemporary forms of spectacle the idea of film as a moving tattoo is even more explicit: for example, the live performance *Moving Ink* (2015), by a visual and multimedia artists' collective from Lisbon, mixes projections and real tattoos; here the tattooed bodies of some models are mapped and then hit by screenings capable of bringing to life their skin drawings, making them flow on the surface or "get out" of their bodies.[19]
In other cases, the tattoo culture mixes with the *high tech* culture, reaching the superimposition of bodily pictogram and technological device: beyond the sci-fi "whiteboard" made of liquid material that can be injected into the lower level of the skin,[20] there are already prototypes of sensing tattoos to apply on fingers which are created with an electro-conductive ink capable of printing on the skin very thin wires and electrodes connected to a computer and to a wrist micro-controller;[21] by touching them or performing a minimal gesture, it is possible to transmit commands, but also to read various reports on the tattoo's surface: these practices turn the skin into a real display (and perhaps the tattoo into the key-ancestor of cinema).

Finally, from another point of view, that of the minimal illusion of movement produced by classical tattoo (Eco's cinemorph), and from the standpoint of the great affective function of tattooing (as memory, autobiography, trace of an identity, declaration of passions), the typical media-object which today seems to collect the legacy of the tattoo, by welding it to the cinema, is the animated GIF.

Today, GIF is the exhibition of the cinematic in itself: it doesn't show just a movie fragment, instead it reveals the multiple dialectics that connect film and photography. Here the "cinemorph" gained its own spectacular independence, because attention is grabbed by the border between stillness and motion, often conveyed by the generation of a gesture: the moment a face contracts into a smile, the eyes turn around, the hands perform small uncontrolled movements. It returns also the tight link between gesture and moving image, as well as the analysis of the mechanics of body movements updated to the digital era, but still pervaded with archaeological features; somehow, GIFs bring us back to pre-cinema, to the circularity and repetition that, as recently argued by Gaudreault and Dulac, were typical of optical toys, most of all zoetrope and phenakistoscope.[22] Similarly GIFs, in particular those whose movement is just suggested, almost an optical illusion that produces the simple pleasure of seeing an image come to life, are connected with a thin line with the tattoos that slightly move through body gestures.

American designer Evan Hawkins's work clearly connects the experiments of Muybridge with the motif of tattoos by creating a "stop motion tattoo animation" with the reproduction of eleven chronophotographs of the famous Horse in Motion by Muybridge (1872) tattooed on different human arms (fig. 66): the final patchwork of bodies, skin fragments, and the gestures required to make the images visible summarize the above issues; moreover, the success of this work is related to its viral diffusion, to its spreading on the web as a very short loop clip that, while not precisely a GIF, recalls its main features, especially circularity.

The special type of GIFs devoted to movies are of particular interest, because they might correspond to the same drive which characterizes tattooing: the drive of possessing the loved images[23] and embodying them, in some way. GIFs satisfy the possessiveness of (young) film lovers who want to appropriate, store, and use movie scenes to tell their own stories; the same need was satisfied in the pre-digital era through tattoos, as testified by the numerous bodies tattooed with cinema stars and cult scenes (figg. 67-68). In some way, both are practices through which an image gets to be worn, embodied, and used as a form of expression. Of course, the GIF image regards the body only insofar as it has been manipulated and created by the consumer, and then used by him as an image of the self to be disseminated in the many platforms of the digital communication; although the connection with the skin is weak, GIFs share the same logic of tattoos (image-gesture) and perhaps might be considered fragments of the skin of the film, which is treated graphically and applied to the spectator's devices, which a long tradition interprets as prolonging of his own body.

Let's stay a bit more on this image-gesture logic: beyond the fact that even a simple movement – not only a gesture[24] – can make a tattooed image move, often the figures on the skin and body movement mutually enhance their expressiveness; the intertwining of these two creative forms (an expressive movement and a meaningful figure on the skin) contributes to articulate a state of mind in a complex way; this is something we see in *The Night of the Hunter* by C. Laughton (1955), where the manual pantomimes of the serial killer interpreted by Robert Mitchum make the words *Hate* and *Love* tattooed on his knuckles run in varying sequences, resulting into often conflicting meanings as evidence of the main character's schizophrenia (fig. 69). In Eisenstein, who also dealt, albeit briefly, with tattoos,[25] the essence of images on the skin consists in their being empowered and granting power to their wearer; his reference seems to be the Native Americans' tattoos, which often represented the image of the animal under whose protection the tribe believed to be, an image that, when worn on skin, could avert the evil spirits. But this has only something to do with the above example, in which the character makes use of his power – albeit perhaps in too concrete a sense, with respect to the anthropological horizon opened by Eisenstein – through his tattooed hands. Mitchum's character uses the signs on his knuckles to set up ambiguous morality plays through which he can deceive the village simpletons, and uses them as an embodied pendulum, to enchant his audience – a vaguely hypnotic tool that, also for this reason, evokes cinema.

This interaction between figure and gesture carries a primeval, yet precise, idea of the image in motion, based not just on projection, but on the fusion between the "flesh" of the image and the screen/skin; it is their substantial contamination that makes the image in motion possible. In this sense, the skin is a "medium" according with Michel Serres's interpretation of the word: not a tool for mediation, but a tool for mingling. He wrote:

> *The skin is a variety of contingency: in it, through it, with it, the world and my body touch each other, the feeling and the felt, it defines their common edge. Contingency means common tangency: in it the world and the body intersect and caress each other. I do not wish to call the place in which I live a medium, I prefer to say that things mingle with each other and that I am no exception to that, I mix with the world which mixes with me. Skin intertwines between several things in the world and makes them mingle.*
>
> *Mixture is a more accurate term than medium. Medium, too geometrical, is minimally useful: a center in a volume, when*

it is reduced to an intersection, or the volume itself, when its tendency is to surround. A point or totality, singular or almost universal. A contradictory and inflexible concept.[26]

Illustrations

54. Spiteri's drawing with tattoos, second half of the 19th century (courtesy of The Museo di Antropologia Criminale "Cesare Lombroso," University of Turin).
55. Neapolitan print of Carl Theodor Muller, 1820.
56. Emma De Burgh showing her tattoo of *The Last Supper*, 1897. Picture.
57. Postcard depicting Djita, Egyptian showgirl of the American circus, ca. 1920. Courtesy of The Museo di Antropologia Criminale "Cesare Lombroso," University of Turin.

58-59. Pictures of inmates' backs, from Cesare Lombroso's collection (courtesy of The Museo di Antropologia Criminale "Cesare Lombroso," University of Turin), early 1900s.

60. Picture of an inmate's tattoos, from Cesare Lombroso's collection (courtesy of The Museo di Antropologia Criminale "Cesare Lombroso," University of Turin).
61. Drawing of M. S.' tattoos, known as Materia (courtesy of The Museo di Antropologia Criminale "Cesare Lombroso," University of Turin), late 19th-early 20th centuries.
62. Robert De Niro's back tattoo in *Cape Fear* (M. Scorsese, 1991). Frame.
63. Preparation drawings for Maui's character (*Moana*, R. Clements, J. Musker, 2016).

64-65. *Human Face Video Mapping Projections* (Oskar & Gaspar).

66. Evan Hawkins, *Horse in Motion*, 2011. Animation GIF obtained from 10 tattooed forearms.
67. Tattoo depicting Marilyn Monroe.
68. GIF, Marilyn Monroe.
69. Robert Mitchum's tattooed hand in *The Night of the Hunter* (C. Laughton, 1955). Frame.

Notes

[1] For a report on this exhibition see: Alessio Petrizzo, *Fonti iconografiche sul tatuaggio*, in Silvano Montaldo (ed.), *Il Museo di Antropologia crimninale Cesare Lombroso dell'Università di Torino*, Silvana Editoriale, Torino 2015, pp. 145-157.

[2] There are many books on the history of tattoo; among them: Jane Caplan, *Written on the Body. The Tattoo in European and American History*, Princeton University Press, Princeton 2000 and Steven Gilbert, *Tattoo History. A Source Book*, Juno, New York 2000.

[3] Joe Nickell, *Secret of the Sideshow*, The University Press of Kentucky, Lexington 2005, pp. 181-182.

[4] Margot Miffin, *Bodies of Subversion. A secret History of Woman and Tattoos*, PowerHouse Books, New York 2013, p. 20; these sketches are reproduced in: Fiona MacCarthy, *The Last Pre-Raphaelite. Edward Burne-Jones and the Victorian Imagination*, Harvard University Press, Cambridge (MA) 2012, p. 451.

[5] See Alessio Petrizzo, *Fonti iconografiche sul tatuaggio*, cit., p. 46.

[6] Cesare Lomborso, *Del tatuaggio nei delinquenti*, in Id., *L'uomo delinquente studiato in rapporto all'antropologia, alla medicina legale ed alle discipline carcerarie* (1876), Il Mulino, Bologna 2011, pp. 103-124.

[7] Following the category of Mauro Carbone, *Filosofia-schermi*, Cortina, Milano 2016.

[8] Ernest Berchon, *Discours sur les origines et le but du tatouage, pronuncé par le Dr Ernest Berchon*, Gounouilhou, Bordeaux 1886; Luigi Cerchiari, *Chiromaniza e tatuaggio*, Hoepli, Milano 1903; Abele De Blasio, *Il tatuaggio*, Arnaldo Forni Editore, 1905.

[9] Quoted in: Francesco Ammannati, Silvio Calzolari, *Un viaggio ai confini del mondo, 1865-1868*, Luni Editrice, 2018.

[10] Stressing the fact that Australian people prefer the wavy lines, De Blasio wrote that "the drawing reminds the imprint of the deltoid and pectoral muscles. It is a sort of reproduction on skin of the underlying parts," see Abele De Blasio, *Il tatuaggio*, cit., p. 40 (my translation).

[11] Linda Williams, *Hard Core. Power, Pleasure and the Frenzy of the Visible*, University of California Press, Berkeley and Los Angeles-London England 1989.

[12] *Idem*, p. 38.

[13] Rafael Salillias, *El tatuaje* (1908), Ediciimones Nalvay, Zaragoza 2011.

[14] Umberto Eco, *La struttura assente. Introduzione alla ricerca semiologica*, Bompiani, Milano 1968, pp. 156-158.

[15] Already in 1905, De Blasio reports the case of the "genital cartoon" described by Salillias; thus it was taken from some of Salillias's former works. See Abele De Blasio, *Il tatuaggio*, cit., p. 137.

[16] *Idem*, p. 163.

[17] In this paper, I mention very briefly a few contemporary practices which can be situated between art and popular culture and are capable of rediscovering the link between tattooing and images in motion. In my future studies, I'm going to develop this crucial topic further, as suggested by one of my anonymous reviewers, to whom I am grateful.

[18] "The Count and Countess Pecci-Blunt gave an elaborate costume ball in their house and garden in Paris. The theme was white; any costume was admitted but it had to be all in white. A large white dance floor was installed in the garden with the orchestra hidden in the bushes. I was asked to think up some added attraction. I hired a movie projector which was set up in a room on an upper floor, with the window giving out on the garden. I found an old hand-colored film by the pioneer French film-maker Méliès. While the white couples were revolving on the white floor, the film was projected on this moving screen – those who were not dancing looked down from the windows of the house. The effect was eerie – figures and faces in the film were distorted but recognizable. I had also set up a camera in a room to photograph the guests." Cfr. Man Ray, *Self Portrait*, Little, Brown and Company, Boston-Toronto 1963, pp. 168-169.

[19] Available on vimeo: https://vimeo.com/143296099, last visit 29 December 2018.

[20] See the *Programmable Subcutaneous Visible Implant*, or PSVI, for instance here: http://www.chedonna.it/2014/04/07/nuove-frontiere-tatuaggio-animato-realta-fantasia/, last visit 29 December 2018.

[21] Announced in the Proceedings of the Denver International Conference *CHI 2017* devoted to man-machine interaction (https://chi2017.acm.org/, last visit 29 December 2018).

[22] Nicolas Dulac, André Gaudreault, *Circularity and Repetition at the Heart of the Attraction. Optical Toys and the Emergence of a New Cultural Series*, in Wanda Strauven (ed.), *The Cinema of Attractions Reloaded*, Amsterdam University Press, Amsterdam 2006, p. 229.

[23] For this aspect see: Tommaso Isabella, "Ripetizione e ri-produzione nelle GIF animate," *Cinergie*, no. 11, 2017 (https://cinergie.unibo.it/article/view/7384, last visit 2 August 2018).

[24] The difference between a simple movement of the body and a gesture is clarified by Flusser. See: Vilém Flusser, *Gestures* (*Gesten. Versuch einer Phänomenologie*, Fischer, Frankfurt am Main 1994), University of Minnesota Press, Minneapolis 2014, pp. 3-4.

[25] See: Sergei M. Eisenstein, *Notes for a General History of Cinema*, edited by Naum Kleiman and Antonio Somaini, Amsterdam University Press, Amsterdam 2016, pp. 228-230.

[26] Michel Serres, *The Five Sense. A Philosophy of Mingled Bodies* (*Les Cinq Sens*, Grasset, Paris 1985), Continuum, New York 2008, p. 80.

Simona Pezzano, IULM, Milano

External Perception, Internal Projection. A Skin Eye Disconnection

What best defines the habitat of the contemporary human being seems to be increasingly identified with environments, widely innervated[1] by electronic and digital media, that modify and organize the space of them, and are in turn modified. Or, to put it differently, we live in environments in which media have assumed for us a centrality and a pervasiveness unknown in other ages, changing our daily experience: the environment nowadays becomes mediatic. From this perspective, we consider the images, created by digital technologies, as one of environmental components that reconfigure our relationship with the world: the media becomes environmental.[2]

Deeply influenced by McLuhan, Youngblood – whose importance in understanding the decisive role of the media in our daily life has been recently recalled, among others, by Casetti in the section of his *Galassia Lumière*[3] dedicated to the expansion of cinema – stated that humanity, at the beginning of the 1970s, was about to enter a new era, called paleocybernetic era, characterized by a different sensibility, to which contributed the profound transformation of the environment, by the media, in which people lived and acted. "The intermedia network" of cinema, television, radio, magazines, books, newspapers and, of course, computer "is *our* environment, a service environment that carries the messages of social organism."[4] The intuition of Youngblood, that humanity was living the dawning moment of a new time, comes from the expressive researches begun, at least a decade before, in the experimental environment of the American underground. He sees this experimental artistic works as an answer to the emerging innovations of his time.

I think it is possible to follow the same path searching in contemporary artistic experimentations, sensible to technological innovation, a similar field in which one would discover innovative ways to interact with today's media environment, thanks to a creative use of the digital technologies available today.

To guide my research, I choose *Carne y Arena* (figg. 70-73) – one of the most dazzling, innovative and ingenious realization in Virtual Reality – because it produces a sensory dissociation experience for the visitor: stimuli that derive from different senses – touch and sight in the first place – that reveal themselves to be not coherent. What happens in the interaction with the elements of this art installation is the interruption of a certain perceptual automatism, which forces us to question ourselves on how the sensorium (the organization of the senses) works in perceiving both the external and the inner world, opening at once new horizons of experiential possibilities within the contemporary mediascapes,[5] in which we find ourselves living today.

Employing the most advanced technologies, this installation definitely marks a turning point among VR experiments, in setting itself as an evolution of the cinematic apparatus. In fact, this work was realized by a movie director, the Mexican Alejandro G. Iñárritu, in collaboration with the award-winning cinematographer Emmanuel Lubezki, and it has been included in the Official Selection of the 70th Festival de Cannes. Moreover, at a later time, the Academy of Motion Picture Arts and Sciences awarded *Carne y Arena* with a special Oscar for: "Having open a new doors of cinematic perception"[6] as John Bailey, Academy President, declared.

However, I will leave aside this aspect to concentrate instead on what interests me the most: the sensory disconnection between what the eye perceives and what is touched through the cutaneous surface of the skin.

Before getting to the heart of the matter, which titles my paper, I would like to take some time to briefly describe this individual experience[7] "where physicality and virtuality navigate together" – to quote Iñárritu's words – "integrating a physical, theatrical journey combined with the virtual in the middle."[8]

Carne y Arena (Virtually Present, Phisically Invisible) is a three-act installation, produced by Legendary Enterteinment and Fondazione Prada and has been presented in its extensive full version in the Deposito at Fondazione Prada in Milan, from June 2017 till January 2018. Based on true stories, Iñárritu adapted the real events happened to many Mexican and Central American immigrants and refugees, for creating this simulated experience, which allows individuals to walk in a vast desert space and thoroughly live a fragment of the refugees' personal journeys. As he declared in an interview with Germano Celant, Fondazione Prada's Artistic and Scientific Superintendent, his intention was "to finally break the dictatorship of the frame […] and put the visitor in the space" let him/her going "through a direct experience walking in the immigrants' feet, under their skin, and into their hearts."[9]

The visitor alone enters a vestibule, illuminated by a cold neon light, kept on purpose at a low temperature (around 8°C, approximately 46.5°F). The kind of room, the holding cell, which many migrants interviewed by Iñárritu called "freezer," because of "how cold they kept them."[10] Some benches take up the space. All around, scattered hastily used shoes of different sizes and shapes are abandoned on the pavement. A written warns that those boots and those sandals have been lost by real people attempting to cross the border between Mexico and Arizona. Here the visitor is invited to take off socks and shoes and wait in this uncomfortable environment for the warning signal on the wall, a flashing red light, that will introduce her into the actual installation room.

This is an almost dark large room illuminated only by an orange light, whose floor is covered with gravel and sand. Attendants provide the visitor with an Oculus Rift virtual-reality headset, headphones and a backpack – equipped with a Nomadic Modular System. Forty-eight hidden (video) cameras, spread around all over the room, will geo-locate the visitor in order to follow her moving in the vast closed space of the Deposito (fig. 71). And the immersion begins.

The visitor finds herself in the vast desert on the US-Mexico border: *visually* the technological tools generate a landscape at the sunset, while *physically* she has the sensation of the gravel under the plants while she starts walking.

In the gloaming, one starts hearing the first voices from around, and little after the visitor catches sight of scared and hungry Mexican refugees walking through the desert. As the headset is provided with a motion detector, it is possible to move in various directions. What happens, since one is attracted by their voices and talks, is that one would try to get close for interacting with them. In fact, as one hears the shouts of the "coyote"[11] screaming to move faster, the cries of children or the mourning of the elders, she would like to offer them support, by somehow try to help them (fig. 72).

All of a sudden she hears the sound of an approaching helicopter. A slipstream effect and a noise, become fast deafening, create the impression of its imminent landing. Two SUVs from Border Patrol show up full of cops with machineguns, who aggressively block everyone, ordering to pull their hands up, threatening both refugees and the visitor with a laser pointer mounted on one of the rifle. As it possible to read on the newspapers' reports,[12] some of the participants raised their hands, others knelt on the ground, frightened by the policeman's shouts, which seem to address them directly.

Then there is a sort of swerve, a separation.

After that scene of great fear and emotional involvement, the visitor finds herself in a less disturbed situation. She can now look around: some migrants are lying on the ground, sleeping; others are answering the pressing questions of policemen. She can also see some migrants intent on watching, also in a sort of dreamlike scene, a small animated sculpture on a table: figurines crowded on a boat, which unexpectedly flips into the sea. A recall to other dramatic border crossings.

In the end everything disappears. It is the dawn of a new day. The visitor, now alone, looks around immersed in the splendour of that deserted environment, shrouded in a silence just broken by the sweet sound of the wind that crosses that immovable vastness, which no longer bears any traces of the tragedy just passed.

The VR experience is over.

Leaving the room, one crosses a long corridor with sheet metal walls. From the cracks she can glimpse the next visitor who is about to live the same, and yet always different, immersive experience; but this also should be a way to let the visitor live what happens to Mexicans while they are trying to communicate with some of other family members who are beyond the border. At the end of the hallway, one reaches another room, that features on a wall the portraits of all the actual migrants, which Iñárritu interviewed over the course of four years – on whose stories the script is based. In fact, according to the director's words, he worked on what really happened to the people he met to create *Carne y Arena*: "By adapting the events experienced by one or many of the immigrants during their journey across the border and adding specific details described them, I wrote and staged a scene creative a multi-narrative space that integrates many of them in what could be called a semi-fictionalized ethnography."[13]

Immigrants look straight in the visitor's eyes, shot in a full close-up, almost frozen, as if they were a sort of tableaux vivant. So we come to know: from where they started, the misfortunes they had to undergo to cross the border, the horror they saw and experienced on their skin, and finally their present condition of people who have laboriously tried to build a new life in a new country. Not only Carmen, Luis, Lina or Selena migrants' stories are recorded on video, but also that of John, an American Border Patrol agent, whose horrible experience in watching people dying of heat exhaustion is here remembered. It is not easy also for some of the policeman to deal every day with people that risk their own life to reach the US, forced to leave their own countries, to run away from conditions that are no longer bearable: some from extreme poverty, in families with many children to feed and without a job's prospect; others from the gangs that threaten anyone who does not follow their law.

So, the question is what kind of experience the visitors live in a media environment such as this immersive installation?

Many Italian scholars are reflecting about this issue taking Iñárritu's work as a crucial moment, since its importance in the experimental artistic field, and the theoretical impact it has had, is out of the question.

Pietro Montani, for instance, defines it: "Una delle più innovative, spettacolari e raffinate realizzazioni messe a punto nell'ambito della sperimentazione artistica con la Realtà Virtuale."[14] That is the reason why he gives to *Carne y Arena* an important space in his last book since he considers it as an example of a "costruzione di uno spazio politico esemplare grazie a un intreccio creativo tra mondo reale e mondo simulato."[15] Writing about it, Montani underlines two aspects, among the many.

First: due to the almost immersive character the visitor soon realizes that she is completely passive within that media environment, "nessun vera iniziativa egli potrebbe prendere in quell'ambiente, in cui non di meno si muove liberamente e a cui indubbiamente partecipa, in modo profondo, condividendo le paure e gli orrori dei presenti."[16] But immediately after that, it is also extremely clear that "quella passività è un *elemento strutturale* della macchina spettacolare complessiva,"[17] the only way to deeply and radically share the existential condition of passivity that characterizes the refugees. Secondly our imagination is here called to a singular work of dissociation of some perceptual automatisms (first and foremost seeing and touching). In short, this environment forces the imagination to give up certain automatisms and at the same time moves in "uno spazio esperienziale nel quale è necessario procedere con *altre regole*."[18]

The role of imagination in Montani's discourse is decisive.[19] Following the paradigm of Kant's critical philosophy, he outlines its function as an interface between intellect and sensitivity, which guarantees a constant connection with the real world. This interaction with the world-environment for Montani is – here the crucial point – of a very *technical* nature: the imagination is able to recognize objects as possible artifacts, or to say it in a more radical way, the imagination interacts with the environment basically in a technical perspective.

Also Andrea Pinotti writes about *Carne y Arena* as one of the ways, typical of the contemporary, with which, in the course of history, images have attempted to challenge "la soglia che separa il mondo iconico dal mondo reale,"[20] thus creating paradoxically *aniconic* images. Images that deny themselves, to become *environment* images, "dotati di *affordances* e *agencies*"[21] – as in the case of the Iñárritu's installation. They provide a multi-sensory involvement (tactile, visual, auditory, but soon even olfactory and gustatory) the access to which is getting more and more close to a real experience.

Starting from the double subtitle that accompanies the work, Pinotti takes into consideration the virtues, but also the limits with respect to the promises of involvement. The notion of "presence" (*Virtually Present*) in the media environment is a complex phenomenon: the visual field fully saturated by the image and the end of the frame evoke a strong sense of presence. However, it is a paradoxical presence, which implies "virtualità ed *embodiment*"[22] at the same time, and which responds to the logic of transparent immediacy described by Bolter and Grusin in *Remediation*.[23] The second specification (*Physically Invisible*) remembers that the visitor is present on the scene, but nobody can see her. Even more: she is also invisible to herself. A limit that frustrate the expectations of those who try (in vain) to interact with migrants.

Reflecting both on the limits of this type of presence – promised by virtual environments – and on the necessary and sufficient conditions to have aniconic images, Pinotti rejects the "on-off model," proposed by Calleja,[24] preferring to it the *gradient* one. The aniconic nature of this class of images must rather be considered a property "che si dispone lungo una scala dal minimo al massimo,"[25] a property that can be found at different degrees along a scale of increasing value. This choice, underlines Pinotti, allows us to exploit the heuristic perspective that the contemporary an-iconic images have disclosed – as Iñárritu's installation exemplary did – and thus be able to rethink, in a theoretical original perspective, of all those images that, over the centuries, denied themselves.

For Adriano D'Aloia, *Carne y Arena* offers an exemplary opportunity in the wake of his reflections on the tension produced by VR towards cinema, whose boundaries are continually redefined in the encounter with these new devices. The insistence on the immersive and empathic character that normally surround the rhetoric about VR – and can also be found in this installation – should be compared with the forms through which this empathy can be effectively realized. D'Aloia, considering empathy from a cognitive and aesthetic psychological perspective, refers to it as "an immediate and pre linguistic modality" which allows to know someone else's internal state – including his or her thoughts and feelings – in "a relationship, be it real or artificial."[26]

So in the Iñárritu's installation which, although it offers an immersive and empathetic experience, is however subjected to a paradoxical dynamic on multiple levels. First conflict is created between tactile solicitation and visual perception. In fact, at the same time, the body of the visitor is from one hand stimulated, but on the other hand denied by a double paradoxical invisibility: to himself and to others, namely migrants. Second, "è un'esperienza intersoggettiva ma autosoggettiva"[27] since aspect persists that reduce the effectiveness of empathic engagement with migrants, that are "poco realistici e più simili agli avatar dei videogame o dei mondi virtuali"[28] or the fact their bodies can be literally "[...] trapassati come fossero dei fantasmi."[29] In the end, "it is an experience in which the fact that the screen is everywhere makes it feel as though there is no screen at all,"[30] even though there still exist an organization of the perception. "An immersive experience," therefore, – according to D'Aloia – "but also constitutionally *emersive*, one of proximity and distance […] an illusion that is insurmountably partial."[31]

Here I would like to underline the aspect related to the perceptual disjunction between the haptic and the visual sensations, between the sensation received from the senses of touch, through one's skin, and what is perceived with the eyes. As Paterson remarks – writing about the importance[32] of *The Senses of Touch*, as his book is titled –, it exists a complex relationship between vision and touch, of which this installation marks a new and unexpected stage.

On the optical side, the disconnection is immediately evident. As soon as the visitor is wearing the head-mounted display, she sees the whole environment she is immersed in, but no part of the body falls under her gaze. While, on the haptic side, the feeling of cutaneous touch, when the sand brushes the skin underneath her feet, it makes her aware of their presence, although they remain unexpectedly invisible for her. The perceptual coherence between tactile and visual stimuli, which anyone is used to, in his/her everyday embodied tactile-spatial experience, do not work in this environment.

While the five senses are commonly considered as outward-oriented, "the brushing of object against the skin implies not only cutaneous receptivity but also a spatial awareness that derives from interoceptive (inward-oriented) sense of bodily position, movement and balance."[33] Paterson therefore claims that walking through a construction involves combined somatic senses and a correlation between vision and touch. But here, in the quasi-immersive installation, the sensory stimuli one receives through the skin – this interface that allows to connect with the external world – can not be used in this space which is perceived only visually. From one side what a visitor sees, thanks to the head-mounted 3-D viewer, of the environment in which she should move – and which should address her action – is not usable to orient her in the real space in which she is. From the other side, there is a disconnection between what she feels through the barefoot plants – the grains of sands that touch her skin – and the void that the visitor experiences in the failed attempt to touch or to grasp something or someone with her hands.

The so primordial feeling of being in contact with the surrounding world through touch is here partially disregarded. The visitor in fact keeps on sensing her body and presence thanks to the "combined information of innumerable receptors and nerve endings"[34] that inform her skin and stimulate the tact but, at once, she experiences the frustration of not being able to grasp anything with her hands: none of the migrants she sees in the simulated world could be reached or helped. The immediacy of sensation one feels reaching out to touch and caress an animate object, which is "affirmative and comforting, involving mutual co-implication of one's own body and another's presence,"[35] – as Paterson explained – is here missed.

This unexpected and uncomfortable perception of the impossibility to grasp anything with her hands leads the visitor to realize that this sense of passivity she is experiencing is precisely the kind of condition in which the migrants find themselves living in. She feels in her own body, literally on her own skin, exactly the sort of impossibility to act, to have taken on the world, which essentially characterizes the experience of being a migrant. It is also true however that the circumstances in which the visitor is experiencing this journey through the desert are not exactly the same of those encountered by migrants. This sensation of being partially present in the real world, thanks of the continuos contact with the sand, and at the same time partially involved in the Mexican migrants odyssey, through the mounted head viewer, puts the visitor in the conditions of an unarmed eyewitness. Therefore Iñárritu's artwork makes visitor aware of the kind of state that we Westerns live on a daily basis as helpless spectators of dramatic events. Or, to better say, "almost" a spectator – according to what Carbone explained in his keynote speech during the last conference held in Gorizia on March 2018[36] – since the continuos transmission of haptical sensations received through the skin complicates the position of the visitor who finds herself suspended between the active role of a viewer and the passive one of a spectator.

There is also something that happens (or rather that could happen) in this installation – according to the role of gestures – I am interested in emphasizing here. In an attempt to get closer to touch the bodies of migrants, which obviously escape one's grasp, something unexpected may happen under certain conditions. If the visitor, in fact, tried to reach physically the avatar of the migrants, that is, tried to touch them, to get a physical contact with them, in place of those image-bodies, another image appears: a pounding heart suddenly materializes before her eyes, as in a magical act.

I open here a short parenthesis on the type of image the visitor *has just made appear*.

The image is that of a heart as it could be obtained from a Magnetic Resonance Imaging, that is the result of a sophisticated diagnostic technique that allows to obtain an image of the heart muscle anatomy. This image, however, is linked to what the director used as a poster for his work and which the visitor meets at the entrance of the installation. I mention this en passant, to remember that cinema was born in coincidence with the invention of X-rays, in a time in which – "questo sguardo scientifico del tutto nuovo, che penetra nella carne e mostra l'interno," has been accompanied by "immagini in movimento [che] restituiscono, al contrario, l'aspetto fenomenico del corpo."[37] And probably is not a purely coincidence that in this Virtual Reality simulation – not surprisingly realized by a film director – both types of glances are kept together.

To come back to what I was describing, the hands of the visitor moving in the air, to try to make contact with the bodies of the migrants, reactivate here two functions: the visual and imaginative dimension of the hand whose gestures are able to make the images appear. Moreover, here it is activated also one the function of the screen, when the hands of visitors crosses the migrants' image bodies. The problem of the screen is always the problem of an object which protects from light radiation but which, at the same time, allows the manifestation of the phenomenon: the appearance.[38]

The visitor is therefore living this disjunction between haptic and visual sensation finding herself being in a hallucinatory experience, very similar to that of dreams. We could even think of the dream as a precursory of the experience of virtual reality. If you look at the visitors while they are intent on living the quasi-immersive reality, they appear to move in space and make gestures with their hands that are meaningless compared to the spatial coordinates of the external world. The movements of the body and hands of those who wear the special viewers make sense only if they are connected to the simulated space in which they are visually immersed. As it appears watching from the outside any contemporary art installation realized in Virtual Reality, such as for instance *The Bird Lady* by Hayoun Kwon, hosted last year at the Palais de Tokyo in Paris. In this installation the visitors' movements, and their gestures in particular, are required to allow them to progress in the story. They discover the world of *The Bird Lady*, only by virtual touching what is installed in the virtual designed house, and in particular the many birds cages, that Hayoun Kwon projects from the memory of Daniel – a now retired drawing teacher – confided her with, about an encounter which occurred in Paris with a collector of birds, nicknamed "l'Oiseleuse" or "The Bird Lady."

In this regard, Iñárritu has used the dream-like experience to explain the kind of virtual journey that can be done within *Carne y Arena*. His attempt was in fact to combine a journey into an abstract thought, while remaining connected with the reality, through few elements, such as the breeze, and the wind and the sand under the feet. In this way the director underlines that the visitor never looses the sensation that she is alive thanks of the haptic feeling of the sand she continuously feels through the feet. I quote Iñárritu words here, where he underlines the importance of remaining connected with the reality "which in turn is connected with another reality which is our dreams. It's reality, but it's without the body, without physicality, it's just the mind."[39]

To conclude and give an account of the title of this intervention, one may think that through the use of digital images – which are pervasively conform the highly mediated environment in which we find ourselves living – new scenarios are opening up, which we will soon find ourselves to be confronted with.

Thanks to the creative and research work that some artists are carry out, it is already possible outlining the emergence of an environment regulated differently from the usual ones in which normally we are called to interact. The quasi-immersive environment of the digital reality simulation, taken into consideration here, has shown a possible new direction of a peculiar taking charge of the processes of perceptive disjunction, as a way to use digital technique in a creative manner. In particular the function of the skin in a Virtual Reality environment, such as *Carne y Arena*, is getting more and more ambiguous. From the one side, in fact, the position of the visitor's feet – which is a gesture itself – keeps her connected to the real world. But, from the other side, the impossibility of touching with hands what one sees, wearing the headset, opens to another space: the one created in Virtual Reality. In this environment the body has a double function: first, through the skin, it is a medium, "the ongrown medium of the touch-faculty and the sensations […] take place *through* it,"[40] in this case, – as Aristotle explained in *De Anima.* Secondly, through the movement of the hands, the body works as a proto-screen: casting its own shade on the images of migrants avatar, it brings other images to life.

Illustrations

70. Alejandro Gonzàlez Iñárritu and a baker from El Salvador at a motion capture shoot for *Carne Y Arena*. © Legendary. Photo: Chachi Ramirez.
71. *Carne Y Arena* (Alejandro Gonzàlez Iñárritu, 2017). A user in the experience. Photo credit: Emmanuel Lubezki.
72. *Carne Y Arena* (Alejandro Gonzàlez Iñárritu, 2017). Re-enacting a scene in the desert. © Legendary. Photo: Chachi Ramirez.
73. *Carne Y Arena* logo. © Legendary. Graphic design: Neil Kellerhouse.

Notes

[1] For the term innervation derived from Walter Benjamin, which uses it in a triple meanings, see Francesco Casetti, *Mediascape: un decalogo*, in Pietro Montani, Dario Cecchi, Martino Feyles (eds.), *Ambienti mediali*, Meltemi, Milano 2018, pp. 118-120.

[2] For this chiasmatic relationship that characterizes our present time, see in particular the second part of Pietro Montani, Dario Cecchi, Martino Feyles (eds.), *Ambienti mediali*, cit., pp. 111-178. On the subject of medium as environment, see among others, Giuliana Bruno, *Surface: Matters of Aesthetics, Materiality, and Media*, University of Chicago Press, Chicago 2016; Francesco Casetti, *The Lumière Galaxy: Seven Key Words for the Cinema to Come* (*La galassia Lumière. Sette parole chiave per il cinema che viene*, Bompiani, Milano 2015), Columbia University Press, New York 2015; W. J. T. Mitchell, *What Do Pictures Want? The Lives and Loves of Images*, University of Chicago Press, Chicago 2005.

[3] Francesco Casetti, *The Lumière Galaxy: Seven Key Words for the Cinema to Come*, cit.

[4] Gene Youngblood, *Expanded cinema* (*Expanded cinema*, Pier Luigi Capucci, Simonetta Fadda [eds. for the Italian edition], Clueb, Bologna 2013), Introduction by Buckminster Fuller R., P. Dutton & Co., New York 1970, p. 54.

[5] See, for this crucial notion of mediascape, Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization*, University of Minnesota Press, Minneapolis 1996; for the way in which Casetti redefines it: "Un mediascape è caratterizzato da una profonda interazione tra tecnologie comunicative, pratiche sociali, e ambiente fisico," Francesco Casetti, *Mediascape: un decalogo*, in Pietro Montani, Dario Cecchi, Martino Feyles (eds.), *Ambienti mediali*, cit., p. 121.

[6] http://oscar.go.com/news/winners/alejandro-inarritu-s-carne-y-arena-awarded-a-special-award-oscar-at-the-academy-s-9th-annual-governor-s-awards, last visit 6 July 2018.

[7] As Germano Celant reminds, this experience "is virtual and individual, therefore it cannot be documented in photographs,"(my translation) – that is the reason why we don't have any pictorial documentation of this immersion. See Germano Celant, *A virtual journey in Reality*, in Quaderni Fondazione Prada, *Carne y Arena*, no. 12, Year III, Fondazione Prada, Milano 2017, p. 27.

[8] *Idem*, p. 35.

[9] Quaderni Fondazione Prada, *Carne y Arena*, cit., p. 31.

[10] See for instance Manuel's testimony from Guatemala (pp. 6-7); or Jessica, from Honduras, who uses almost the same words referring to the holding cells in which she and her two brothers where put by the Border Patrol (pp. 18-19); in *Idem*, pp. 4-23.

[11] "The *coyote* is the guy who starts it all. He is the one commanding the whole thing. In real life, he spent something like ten or more years in jail" (my translation), as Iñárritu himself explained in *Idem*, p. 44.

[12] See for instance, Jason Farago, "Iñárritu's 'Carne y Arena' Virtual Reality Simulates a Harrowing Border Trek," *New York Times*, May 17, 2017, https://www.nytimes.com/2017/05/17/arts/design/alejandro-gonzalez-inarritu carne-y-arena-virtual-reality-cannes.html, last visit 6 July 2018. Even if Guillaume Tion writes: "On a du mal à se rouler par terre, hurler ou penser qu'on va mourir, comme envisagé par les organisateurs," Guillaume Tion, "Mandelieu, ville frontière?," in *Libération*, 22 May 2017, http://next.liberation.fr/cinema/2017/05/22/mandelieu-ville-frontiere_1571456, last visit 6 July 2018.

[13] Quaderni Fondazione Prada, *Carne y Arena*, cit., p. 1.

[14] "One of the most innovative, spectacular and refined realization developed in the field of artistic experimentation with Virtual Reality" (my translation), Pietro Montani, *Tre forme di creatività: tecnica arte politica*, Cronopio, Napoli 2017, p. 133.

[15] "Construction of an exemplary political space thanks to a creative interweaving between the real and the simulated world"(my translation), *Idem*, p. 132.

[16] "She cannot take any real 'initiative' in this environment, in which she nevertheless moves freely and doubtlessly participates in a profound way, sharing the fear and horror of those present" (my translation), *Idem*, p. 136.

[17] "Then, and just as rapidly […] she realizes that this passivity is a *structural element* of the entire spectacular apparatus" (my translation), *Idem*, p. 136.

[18] "While organizing an experiential space in which it is necessary to operate with *other rules*" (my translation), *Ibidem.*

[19] For an exhaustive view of the role of imagination in the reflection of Montani, see Daniele Guastini, Adriano Ardovino (eds.), *I percorsi dell'immaginazione. Studi in onore di Pietro Montani*, Luigi Pellegrini Editore, 2016.

[20] "The threshold that separates the iconic and the real world" (my translation), Andrea Pinotti, *Immagini che negano se stesse. Verso un'an-iconologia*, in Pietro Montani, Dario Cecchi, Martino Feyles (eds.), *Ambienti mediali*, cit., p. 238.

[21] "Equipped with affordances and agencies" (my translation), *Idem*, p. 233.

[22] "Virtuality and embodiment" (my translation), *Idem*, p. 235.

[23] Jay David Bolter, Richard Grusin, *Remediation: Understanding New Media*, MIT Press, Cambridge (MA) 1999.

[24] For Calleja, in fact, an iconicity is a property that either exists or not; cfr. *Idem*, pp. 236-237.

[25] "Is arranged along a scale from the minimum to the maximum"(my translation), *Idem*, p. 237.

[26] Adriano D'Aloia, *Virtualmente presente, fisicamente invisibile. Immersività ed emersività nella realtà virtuale a partire da Carne y Arena di Alejandro G. Iñárritu*, in Cristiano Dalpozzo, Federica Negri, Arianna Novaga (eds.), *La realtà virtuale. Dispositivi, estetiche, immagini*, Mimesis, Milano-Udine 2018, pp. 122-123.

[27] "it is both an intersubjective and autosubjective experience," *Idem*, p. 134.

[28] "not very realistic and more similar to the avatars one find in video games or virtual worlds," *Idem*, p. 131.

[29] "passed through as though they were ghosts," *Ibidem.*

[30] Adriano D'Aloia, "Virtually Present, Physically Invisible. Virtual reality immersion and emersion in Alejandro González Iñárritu's *Carne y Arena*," *Senses of Cinema*, 87, 2018, http://sensesofcinema.com/2018/feature-articles/virtually-present-physically-invisible-virtual-reality-immersion-and-emersion-in-alejandro-gonzalez-inarritus-carne-y-arena/#fnref-34428-18, last visit 4 May 2018.

[31] *Idem*, p. 135.

[32] Mark Paterson, *The Senses of Touch. Haptics, Affects and Technologies*, Bloomsbury Publishing PLC, United Kingdom 2007, p. 4.

[33] *Ibidem.*

[34] *Idem*, p. 1.

[35] *Idem*, pp. 2-3.

[36] Mauro Carbone, *From Screens as Prostheses of our Body to our Body as a Quasi-Prosthesis of the Screens?*, XXV International Film Studies Conference, *Exposing the Moving Image: the Cinematic Medium Across World Fairs, Art Museums, and Cultural Exhibitions*, Gorizia, February 28th – March 3rd 2018.

[37] "This completely new scientific gaze, which penetrates into the flesh and shows the inside, has been accompanied by "moving images that on the contrary reflect the phenomenal aspect of the body" (my translation), Barbara Grespi, *Il cinema come gesto. Incorporare le immagini, pensare il medium*, Aracne, Roma 2017, p. 9.

[38] See Mauro Carbone in his *Filosofia-schermi*, keeps intact this ambiguity this ambiguity between hiding and showing, between opacity and transparency, typical of the very meaning of the term "screen," see *Filosofia-schermi, Dal cinema alla rivoluzione digitale*, Raffaello Cortina, Milano 2016.

[39] Quaderni Fondazione Prada, *Carne y Arena*, cit., p. 33.

[40] Aristotl, *De Anima* 423a quoted in Mark Paterson, *The Senses of Touch. Haptics, Affects and Technologies*, cit., p. 17.

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Reversible Skins and Internal Images: Visibility Issues

Introduction

The skin is both a border encapsulating our bodies and a surface revealing them and it serves as metaphor for the relationship between our interior and exterior lives. In this paper, I explore the "figurability" of skin, arguing that the skin can be considered both a medium and an artistic object (an image, a sculpture) with which we articulate our representations of the world.

In the first part of my essay, I take into consideration the role of human skin in relation to the theme of exhibition, exploring the philosophical concept of the *expeausition* (Jean-Luc Nancy) and examining how it highlights the skin double function: in fact, this French neologism playing with the similar phonetics of *po* and *peau* (the French word for "skin") means that the skin is an exposition/inscription surface where bodily, psychological, scientific, and artistic (self-) representations become visible; but it also refers to the skin as a thick matter which carries within itself the flesh underneath together with our deep feelings and sensations. In brief, the skin is not a surface hiding interiority but rather a complexly layered organ with its own interiority,[1] which allows us to articulate our body images within society.

Just because it is a relational organ suspended within the flesh and serves as both the body covering and the body depth, the skin has been a privileged receptacle of intertwined cultural discourses since antiquity, involving a dialogue among visual arts, anthropology and medical sciences. In the second part of my paper, I analyze this dialogue, through specific examples drawn from ancient cults – the rites in honor of the Aztec God Xipe Totec – and surgical operations like skin grafting, a technique known since the 7th century BCE. Although dissimilar in context, the ritual and the medical practices demonstrate that the skin is a dense substance, which can be stripped off, reversed inside out, montaged along different parts of the body, and exchanged among different people as a deep, movable, and malleable material; in brief, they endorse the interpretation of the skin not only as a subjective exhibition surface – showing, for example, personal birthmarks, disease scars, and tattoos –, but also as a powerful plastic tool giving the opportunity to construct new body shapes together with alternative images of the self.

It is not by chance that these qualities have attracted many contemporary artists: works like *Vanitas: Flesh Dress for an Albino Anorectic* (1987) by Jana Sterback, *Hautnah* (1995) by Alba D'Urbano, and *Harlequin Coat* (2010-2011) by Orlan turn the skin inside out and move it around in various ways, making it the place where outside and inside, medium and figure, science and art literally merge, so as to offer new representations of bodies. Similarly, the installation *La salle des peaux perdues* (*The Lost Skins Room*, 1999-2003) by Stéphane Dumas, made up of skin-like rectangular veils in latex and silicon bearing imprints of different human organs, shows the skin as a thick surface capable of molding internal body parts, a sort of biological film (pellicle) which is support for corporeal images and, at the same time, a material figure (a sculpture) itself.[2]

Expanding this interpretive perspective, cinema has, on its part, elaborated the notion of the film/screen as a skin filmic matter which is able to capture, retain, and remodelling internal images. In the final part of my essay, I examine Pedro Almodóvar's *La piel que habito* (*The Skin I Live In*, 2011), a medical-themed film whose main message is to testify that an artificial skin grafting is insufficient to activate the complex process of the *expeausition*.[3] I maintain that, through the representation of a skin which is flawless and perfectly smooth but unable to "incarnate" the self, Almodóvar's work declares the need for a fleshy, layered, and mobile dermis in order to reaffirm the subject as a place where the body and images make one another. If seen in this perspective, *The Skin I Live In* draws explicit attention to the corporeal and sensitive qualities of the (celluloid) film and the indexical nature of video, especially in our age of digital technology, indicating the skin as the privileged expression of both the film medium and the filmic matter.[4] It is no coincidence that in the past few years the most recent medico-technological researches have been trying to turn the skin into a responsive screen, thus confirming its ability to generate, show, and move (internal) pictures.

As Giuliana Bruno brilliantly argued, "the relation of cinema to physiology concerns their very formations as languages, insofar as both articulate and analyze the body in movement"[5]: I argue that the skin is at the origin of the formation of the cinematographic language because of its own mobile reversibility between the outside and the inside, its capacity to be montaged along the body and, above all, its power to be both a sensitive (superficial) screen and a moving (stratified) image.

Expeausitions

The skin articulates our visibility in the world. It is by its very nature and function an organ that exposes, puts on display. Even if one of its primary functions is to contain and protect our internal organs, the skin also shows them up by tracing the contour of our own anatomy, expanding and shrinking itself with respect to body changes in weight, musculature, or skeletal system. Moreover, thanks to its porosity it acts as a membrane, leaking from the inside and absorbing from the outside:[6] it is a tactile organ which communicates our health, age, ethnicity, but also our feelings and emotions (through blushing, paleness, rashes…). In short, the skin is on public display, controlling our appearance and affecting our relations with other people. As cultural theorist Steven Connor points out, the skin "figures. It is what we see and know of others and ourselves."[7]

Not surprisingly, this relational organ is considered the oldest human medium: its history as a medium dates back to pre-historic times, when practices such as tattooing or body painting were used to adorn the body and modify its appearance, thus showing a person's belonging to a group, specific cult practices, or, in modern times, unique individual peculiarities.

The relation between skin and visibility marks the cultural imaginary of different eras, and what emerges as a constant is the dialogue between the sciences, which study the skin as a porous, communicative membrane, and visual practices, which interpret it as a medium and as an object of representation, capable of expressing its powerfulness in both optic and haptic terms.

In the Renaissance for example, the skin superintends the staging of the internal organs. In many 16th and 17th century anatomical illustrations of flayed men, the skin is cut and raised, almost turned upside down, as if it was a stage curtain allowing to peer inside the body and spectacularizing its inner parts: indeed, in these pictures the human body is represented in artistic poses as still alive and shows (literally) itself (fig. 74). Thus, the early-modern scientific cutting of the skin led to the aestheticization of bodily organs: in *The Body Emblazoned* (1995), cultural historian Jonathan Sawday argues that the flayed corpse in the hands of Renaissance anatomists is "transformed into the matter of art,"[8] that is to say, it becomes the privileged object of artistic representation, but also an aesthetic material (an aesthetic matter) itself.

The skin is confirmed to be a primary vehicle of exchange between science and art in modern culture as well. The first school of dermatology, established in 1801 at the Hôpital Saint-Louis in Paris, testified a new interest in what came to be considered an organ with a peculiar pathological profile, and not just a simple tegument marking the body's internal disorders. And so, in order to study and be able to identify the variety of skin diseases, their manifold textures and colours, which were difficult to describe with language or even with monochrome engravings, many scientists relied on color illustrations made by artists, who were asked to reproduce the skin as a privileged representational surface, a site of different inscriptions and figures.[9]

Throughout the centuries, the skin has testified to our ability to represent not only the body but also *with* the body. From this perspective, it is interesting to note that in Italian and other Roman languages the celluloid membrane coated with photosensitive material used since the late 19th century in photography and later in cinematography to record a series of images is called *pellicola* (pellicle) and derives from the Latin *pelle*, the organic skin.[10] As a matter of fact, the photographic and cinematographic film, and in some respect the canvas as well, are skins, act like skin-media.

It is no coincidence that the skin is interpreted as a surface of figuration even in psychoanalytic sciences. In his influential work *Le Moi-peau* (*The Skin-Ego*, 1985), French psychoanalyst Didier Anzieu defines the dream as a *pellicule*, that is a film that is both a "protective shield that envelopes the psyche of the sleeper" and "an impressionable" membrane "that registers mental images […] most often animated like cinematic films or rather […] a video clip."[11] According to Anzieu, the dream film – the dream pellicle – helps to protect and represent our unconscious mind, ensuring the figuration of our psychic processes to the point of transforming them into a sort of internal movie.

In brief, the skin is a film that helps to figure our social and individual self both on the outside and the inside of the body, both physically and psychologically. As boundary zone and medium of passage, in it the relation between inside and outside, but also between self and others, assumes a preeminent importance over any other body part.

These complicated formulations of the skin as both protective border and exhibition surface are brilliantly summarized in the neologism *expeausition* (skin-show) coined by French philosopher Jean-Luc Nancy.[12] In Nancy's opinion, the skin is the site of unconditioned exposition, where the human body displays itself to the point of expropriating itself; he defines the skin as a reality which exceeds its own frontiers and stands out in a kind of absolute exposure, without, however, eliminating the very act of concealing, because it is capable of revealing and hiding the body at the same time. In fact, the skin exposes the body's nudity, but it declines it in accordance with the body's intimate and invisible inwardness.[13]

In a certain sense, the interpretation of the skin as an apparatus of both visibility and concealment is close to the notion of *arche-screen* formulated by Italian philosopher Mauro Carbone: just like a sort of bodily arche-screen, the skin is capable of both displaying and shielding, and can be considered "a screen that presents itself by exceeding itself," offering us "more than itself" and, in this surplus, it promises us "always something more to see,"[14] that is, a sort of unlimited vision.

It is precisely for this reason, because of its ability to exceed its own boundaries and allow us to articulate our own (in)visibility, that the skin cannot be considered just a surface that exposes – that is, the medium, the screen, the film on which we inscribe figures or the surface where our internal images emerge to. It's not only a two-dimensional, almost invisible, background which supports figuration; rather, the human skin is definitely *the matter of art*, it presents itself as an organ with its own thickness, a stratified material with an inside and an outside which, just because it can go anywhere (as the body's tegument) and be anything (there are skin books, skin jewels, skin bags…), can be made the object in view and become an artwork.[15] In a few words, the skin is a figure in itself.

Moving skins: Ritual and scientific imaginaries

The skin's dual role of support for figuration and figure in itself is well documented in an ancient Mesoamerican ritual, often mentioned in relation with skin issues: the sacrificial rites in honor of the Aztec God Xipe

Totec. Xipe Totec means "Our Lord the Flayed One," even if a more recent translation prefers to interpret his name as "[Our Lord] the Owner of Skin."[16]

He was a death-rebirth deity and artists have usually emphasized his renewal nature by portraying him with two layers of skin, since he was dressed in a sacrificed man's skin symbolizing the new covering of vegetation with which the earth clothes itself each year[17] (if we adopt Nancy's perspective, his double skin can also be interpreted as the emblem of the skin's excessive exposure).

The changing of skin was one of the central acts during the annual festival dedicated to him, when captive warriors and slaves were ritually flayed, dismembered, and then ceremonially eaten. But prior to the flaying, they were transformed into sacrificial images: they were bathed, purified, and dressed as the living image of Xipe Totec; at the height of the festival, after being given new names, the captives were flayed and then their skins were dyed in yellow in order to symbolize the God's golden dress.[18] Eventually, the flayed skins were worn by priests and warriors, who moved through the neighborhoods of the city for twenty days, so that the image of the God – the skin of the God – could be seen by everyone.[19]

It was just with visible dripping dermis and ongoing putrefaction that Xipe Totec's skin moved along the streets of the city and was shown to the inhabitants, who could observe it, see it animated by warriors in mock battles, touch it and even snatch a piece of it.

The victims' flayed skin was exhibited both as a representation of the sacred and the value of warriors and as a skin in its mere facticity, a skin which *presented* itself, and did not just *represent* someone, or something. It is a striking detail that Aztec priests and warriors put on the captives' skin inside out, showing its bleeding internal layer (most likely to prevent toxins from infecting them)[20]: the irregularly shaped, flaky skinsuit worn by Xipe Totec in many sculptures reproduces de facto the papillary dermis displayed during this sort of "travelling exhibition," which definitely exposed the God's skin as a *thick image* (fig. 75).

Being moved by warriors in a number of different places into Aztec ceremonial space, Xipe Totec's skin staged also the ability to be montaged and reassembled on different bodies: indeed, there was a continuous exchange of flayed skins among the captors, and these skins could swap places even over the same body, since they could be reversed and turned inside out.[21]

Today, this mythical imaginary of skin exchange, montage and reversibility can be found in science, within the surgical field of skin grafting. Skin grafting, which originated in ancient India approximately in 600 BCE and improved as a reconstructive option in France in the second half of the 19th century, has always moved the skin from one region of the body to another or even from the body of a person to the body of another person, tracing different dermic migratory paths; already in the 16th century, for example, the skin of the forehead and that of the arm were used for rhinoplasty.[22] In the last decades, surgeons have developed a new technique for the reconstruction of oral mucosa, named *reversed dermis graft* (RDG), an operation which concretely demonstrates the skin's mobility and reversibility, since the dermis, taken for example from the inguinal region of the patient, is freed from the epidermis and then transplanted upside down in the mouth.[23]

Thanks to grafting surgery, the skin moves along the body of a single person, but also between two or more bodies, that is from one individual to another: from this perspective, Xipe Totec's ritual imaginary of skin exchange is restored in new (totally different) forms of expression. Starting just from the image of Xipe Totec, in his essay *Les figures du visage greffé, une connaissance par le montage* (*The Grafted Face's Figures, Knowledge Through Montage*), French art historian Raphaël Cuir recreates a sort of Warburgian atlas dedicated to the topic of face/skin transplantation.[24] In Cuir's atlas, the photos of the God are combined with those of Christiane (Edith Scob), the heroine of Georges Franju's *Les yeux sans visages* (*Eyes Without a Face*, 1959),[25] and those of Isabelle Dinoire, the *first* full *face transplant* patient in 2005 (fig. 76).

Certainly, there are evocative formal resemblances between these disparate photos, and their montage reminds us of an archaic rite of passage, but in my opinion there is a big symbolic difference between the plastic mask of Christiane – in the film, she is forced to wear a white covering – and the skin mask of Xipe Totec, and it is precisely on this difference that the concept of skin as a stratified and reversible figure is formulated.[26]

Christiane's mask, associated with the white dresses she always wears, is a protective object, a sort of unalterable surface which bears no relation to her skin below (or rather to her flesh below, since she is disfigured) and is incapable of producing figures because it lacks the connection between the inside and the outside of her body. Even worse, the white mask and dresses are inadequate screens that make Christiane losing her own figure, turning her into a sort of ghost, a prisoner of her father's ideal of skin perfection: they are not able to *expeause* her skin's thickness, revealing only a blank screen canvas devoid of any identity sign.

In *Les yeux sans visages*, the skin appears as a thick and reversible figure in a few scenes only: the first when Dr. Génessier (Pierre Brasseur) removes the entire face of a donor-victim in order to transplant it on his daughter's visage, and the other when Christiane's immune system rejects the donor's newly implanted face and we witness to its twisting and falling, to the fleshing out of its perfect surface (fig. 77). Christiane's meaty and stratified skin seems to affirm its power over the smooth tegumental surface surgically pursued by Dr. Génessier even in the film's finale, when the masked protagonist leaves the house where she was kept prisoner and releases all the dogs which her father used for his experiments; one of them attacks the surgeon and tears his face to pieces, emblematically revealing his dermis's inner side.

Double skins

Georges Franju's classic horror film has been recently revisited in Pedro Almodóvar's *La piel que habito* (*The Skin I Live In*, 2011). The film tells the story of Robert Ledgard (Antonio Banderas), a plastic surgeon who is haunted by the tragic deaths of both his wife and daughter; this "mad doctor" illegally creates a new synthetic skin and uses it to transform Vicente (Jan Cornet), the boy who raped his daughter and finally caused her suicide, into a woman, Vera (Elena Anaya). Vera, whose name is etymologically associated to the Latin word *vèrus* (true), is ironically remodeled by Robert in the likeness of his dead wife.

Vera's transformation goes through an intermediary step, in which, just like Christiane, she wears an anonymous, blank mask and a flesh-coloured suit which act as her actual skin. They are protective coverings which anticipate Vera's synthetic skin, a skin which digital technology shows as absolutely pure and free from imperfections: according to scholar Carla Marcantonio, it's Almodóvar himself who creates the woman's perfect skin through digital manipulation during the postproduction process, thus becoming "the film's ultimate mad doctor."[27]

This perfect artificial (digital) skin prevents the protagonist to expose (*expeause*) himself/herself, to reveal his/her true (*vera*) identity because it has no depth – there seems to be no thickness or even dermis under it – nor does it figure Vicente/Vera's inner body or psychic mechanisms.[28] Dressed in this skin, Vera is obsessively watched by Robert through a surveillance camera lens installed in the room where she is kept prisoner, to the point that she (ironically?) adopts poses similar to those depicted in the famous Titian's *Venuses* hung in the surgeon's house: in brief, just like Christiane, Vera must reproduce the traditional ideal of beauty, a two-dimensional ideal painted on canvas and devoid of any thickness.

In the end, Vicente/Vera kills the surgeon, thus sanctioning the failure of his project. Almodóvar's film demonstrates that "living in a skin" means not so much being contained in it – from this point of view, Vera's blamable captivity within the surgeon's house is quite eloquent; rather, it means being able to exhibit the skin as a support for figuration and also as a figure in itself, a thick image which can be animated and moved between the outside and the inside of the body and vice versa. Emblematically, Vera paints the white walls of her prison room with words and images telling her distress: in order to counterbalance the traditional paintings of female beauties admired by Robert, her drawings (and also a lot of her fitness poses during captivity) are explicitly influenced by the provocative and antipatriarchal works of Louise Bourgeois and can be interpreted as a sort of extrinsicated tattoos which Vera's fake skin cannot probably support.[29]

Indeed, tattoos, being figures which are applied externally prior to being absorbed into the interior, require a thick, stratified, and reversible skin. As anthropologist Alfred Gell brilliantly argues, tattooing is "a process of involution, the creation of an extra layer by folding the skin over upon itself, making an inside of an outside and an outside of an inside," and this "double skin, folded over on itself, creates the possibility of an endless elaboration of interacting components of the social person"[30]: from this perspective, it is no coincidence that

Vera, who is clearly denied of her social identity, has a skin which doesn't prove to be a thick, relational, and tattoable organ.

The only tattoo in *The Skin I Live In* can be glimpsed on the back of Vicente when the surgeon, after kidnapping him, washes him with a water pipe: a circular abstract motif appears hidden under Vicente's wet white t-shirt, whose thin fabric layer seems to foreshadow the dermal overgrafting which the young man will be forced to undergo in the following sequences. In fact, as it usually happens when one chooses surgical tattoo removal, in the course of the film Vicente's tattoo will disappear under a new layer of (synthetic) skin, thus becoming a figure *inside* his body.

Curiously enough, the circular motif is actually tattooed on the actor's body, on Jan Cornet's body (fig. 78). It is doubtful whether the shot of the tattoo is an Almodóvar's mistake or his precise choice to stress the "real" (*vera*) skin, that is, the skin of the actor and not that of the character, representing it as a figure which moves out and in of the body, going through its stratified dermal layers and folding over on itself.

Since the artificial perfection of Vera's digitized skin betrays the concern over losing cinema's indexical relationship to the world,[31] I think that Almodóvar revisits the Frankensteinian character of the mad doctor in relation to the topic of the skin graft in order to reflect on the material qualities of video. His approach is very different but, somehow, also in line with the method previously adopted by filmmakers and video artists such as, for instance, Tony Conrad (*The Flicker*, 1966), Joan Jonas (*Vertical Roll*, 1972), and Luther Price (*Meat – Self Portrait*, handmade slide, 2005), who exposed the structural aspects of their films.[32]

In all these works, the skin of the film – that is the analog format of the film: the celluloid, the pellicle –, marks the transition of the skin from being a support for/background of the figure to being a figure in itself and vice versa: I think that this is what articulates the skin as the most complete expression of the *expeausition*, because it is able both to expose someone/something and to exhibit itself in its facticity.

By exploring the medico-technological imaginary related to skin, Almodóvar raises issues on cinema's identity and expressive capabilities and, within the broader context of visual culture, participates in the debate concerning the connections among the images of the body, their imaginary morphologies, and their materialisations.

This debate is made even more interesting by the latest medical research on e-skin, an electronic skin which will turn the human skin into a touchscreen, thanks to flexible, bendable and even stretchable electronic circuits. Interestingly enough, these electronic circuits will be applied directly to the skin in a procedure not very different from that of the surgical skin transplantation, because they will be almost "overgrafted" on the body and this operation could also cause problems of bio-compatibility just like any transplant operation.[33]

E-skin will be used to monitor a patient's vital signs; it will also replace the sense of feeling if we have problems with our nervous system or have suffered severe burns, providing us with a new "sensing skin." In short, it will be a new interface enhancing the connection between the body's superficial and deep sensitivity; it will increase the thickness of the human skin with a new thin artificial layer, which will actually bring to view the dermis's innervated structure and sensible circuits. Perhaps, in a way not very different from Xipe Totec's reversed skin (fig. 79).

Illustrations

74. Plate 1 of the Third Book, in Juan Valverde de Amusco, *Historia de la composición del cuerpo humano*, Rome 1556. Illustrator: Gaspar Becerra; Engraver: Nicolás Beatrizet.
75. Anonym (South Central Veracruz), *Xipe Totec*, 300-900 a.d., Ceramic sculpture, Xalapa (Mexico), Museo de Antropología de Xalapa.
76. Raphaël Cuir, "Transplant, violence and rites" ("Greffe, violence et rites"), plate 1 in Id., *Les Figures du visage greffé, une connaissance par le montage*, in François Delaporte, Bernard Devauchelle, Emmanuel Fournier (eds.), *Transplanter, une approche transdisciplinaire: Art, médecine, histoire et biologie*, Hermann, Paris 2015, pp. 217-226, p. 218.

77. *Eyes Without a Face* (*Les yeux sans visages*, Georges Franju, 1959).
78. On the left: *The Skin I Live In* (*La piel que habito*, Pedro Almodóvar, 2011); on the right: Jan Cornet. Photo by Xevi Muntané for *Out Magazine*, October 2011. Detail.
79. On the *left*: Examples of e-skin; *right*: Torso of Xipe Totec, Clay sculpture, Mexico City, Museo Nacional de Antropología.

Notes

[1] Mary Flanagan, Austin Booth, *Introduction*, in Id. (eds.), *Re:skin*, The MIT Press, Cambridge (MA) 2014, pp. 1-15.

[2] See Stéphane Dumas, *Les Peaux créatrices: Esthétique de la sécrétion*, Klincksieck, Paris 2014.

[3] There are many films which articulate the topic of skin, offering different perspectives on it. In her book *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses* (Duke University Press, Durham-London 2000) Laura U. Marks analyzes some of them in an anthropological perspective. Unfortunately, the cinematic skin grafting has never been treated systematically from the point of view of film studies, even if it was already present in two 1920s Hollywood movies: *A Woman Who Understood* (William Parke, 1920) and *The Hero* (Louis J. Gasnier, 1923). Moreover, besides Franju's *Les yeux sans visages* (1959) and Almodóvar's *La piel que habito* (2011), there exists a whole tradition of movies exploring the questionable deeds of crazy plastic/transplant surgeons, including, for example, *Stolen Face* (Terence Fisher, 1952) and *Gritos en la noche* (Jesús Franco, 1962). David Cronenberg's horror movie *Rabid* (1977) can be considered part of this tradition, where surgical skin grafting experimentations coincide with the dehumanizing dangers of uncontrolled technological progress.

[4] Riccardo Venturi, "L'Écran sensible au-delà du cinéma," in *Critique d'art*, vol. 48, Printemps/Été 2017, pp. 1-6, p. 4.

[5] Giuliana Bruno, *Streetwalking on a Ruined Map: Cultural Theory and the City Films of Elvira Notari*, Princeton University Press, Princeton 1993, p. 68. For a more recent discussion on surfaces and materiality, see of the same author *Surface: Matters of Aesthetics, Materiality, and Media*, The University of Chicago Press, Chicago 2014.

[6] Fredrik Fahlander, *The Skin I Live In. The Materiality of Body Imagery*, in Alison Klevnäs, Charlotte Hedenstierna-Jonson (eds.), *Own and Be Owned. Archaeological Approaches to the Concept of Possession*, in *Stockholm Studies in Archaeology*, no. 62, 2015, pp. 49-71, pp. 49-50.

[7] Steven Connor, *Mortification*, in Sarah Ahmed, Jackie Stacey (eds.), *Thinking Through the Skin*, Routledge, London-New York 2001, pp. 36-51, p. 36.

[8] Jonathan Sawday, *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture*, Routledge, London-New York 1995, p. 185.

[9] In many 19th-century illustrations, the patients' skin diseases look almost like tattoos. See Richard Barnett, *The Sick Rose: Disease and the Art of Medical Illustration*, Thames & Hudson Ltd., London 2014, pp. 44-45.

[10] Mechthild Fend, *Fleshing Out Surfaces: Skin in French Art and Medicine, 1650-1850*, Manchester University Press, Manchester 2016, p. 3.

[11] Didier Anzieu, *The Skin-Ego* (*Le Moi-peau*, Dunod, Malakoff 1985), translated by Naomi Segal, Karnac Books, London 2016, pp. 237-238.

[12] Jean-Luc Nancy, *Corpus*, Éditions Métailié, Paris 2000², pp. 31-34.

[13] For an explanation of this concept, see Daniela Calabrò, *Dis-piegamenti: Soggetto, corpo e comunità in Jean-Luc Nancy con un'intervista al filosofo*, Mimesis, Milano 2006², pp. 65-76.

[14] Mauro Carbone, *Filosofia-schermi: dal cinema alla rivoluzione digitale*, Raffaello Cortina editore, Milano 2016, pp. 104-105 (my translation).

[15] On the facticity of skin, see Steven Connor, *Mortification*, cit., pp. 46-50. About skin objects, see, for example: *A notebook allegedly covered in human skin* (c. 1770- 1850. London, Wellcome Institute); Sruli Recht, *Forget Me Knot*, 2013, ring, 24-carat gold and 4-inch piece of skin; Tina Gorjanc, *Pure Human*, 2016, a range of leather prototypes that Gorjanc theorizes could be grown from DNA extracted from hair samples of the fashion designer Alexander McQueen.

[16] Carlos Javier González González, *The Xipe Tótec Cult and Mexica Military Promotion*, in Matthew A. Boxt, Brian D. Dillon (eds.), *Fanning the Sacred Flame: Mesoamerican Studies in*

Honor of H. B. Nicholson, University Press of Colorado, Louisville (CO) 2012, pp. 333-352, p. 333.

[17] George C. Vaillant, *Aztecs of Mexico: Origin, Rise and Fall of the Aztec Nation*, rev. and ann. by Suzannah B. Vaillant Doubleday & Co., Garden City 1962, p. 166.

[18] Neil Philip, Philip Wilkinson, *Mythology*, Dorling Kindersley Ltd, London 2008, p. 342. Other scholars affirm that the God's yellow skin seen in illuminated manuscripts indicates a dead person's skin: see Anne-Marie Vié-Wohrer, *Xipe Totec, Notre Seigneur l'Écorché: Étude glyphique d'un dieu aztèque*, 2 vols, Centre français d'études mexicaines et centraméricaines, Mexico 1999, vol. I, p. 54.

[19] See Davíd Carrasco, "Give Me Some Skin: The Charisma of the Aztec Warrior," in *History of Religions*, vol. 35, no. 1, [Mesoamerican Religions. A Special Issue on the Occasion of the Seventeenth International Congress of the History of Religions, Mexico City, August 5-12, 1995], August 1995, pp. 1-26, pp. 4-12.

[20] Antonio Aimi, *Xipe Totec*, in Id., *Maya e Atzechi*, Mondadori Electa, Milano 2008, pp. 224-225, p. 225.

[21] Davíd Carrasco, "Give Me Some Skin," cit., p. 11.

[22] For a brief history of skin grafting, see Gina C. Ang, "History of Skin Transplantation," in *Clinics in Dermatology*, vol. 23, 2005, pp. 320-324.

[23] The skin reversal is practiced in order to avoid the growth of hair in the oral cavity. See Minoru Ueda, Toshio Kaneda, Masaru Nagayama, Tohru Oka, "Clinical Evaluation of Reversed Dermis Graft for Reconstruction of Oral Mucosa," in *Nagoya Journal of Medical Science*, vol. 48, 1986, pp. 33-45.

[24] Raphaël Cuir, *Les figures du visage greffé, une connaissance par le montage*, in François Delaporte, Bernard Devauchelle, Emmanuel Fournier (eds.), *Transplanter, une approche transdisciplinaire: Art, médecine, histoire et biologie*, Hermann, Paris 2015, pp. 217-226.

[25] The film is about the failed attempts of plastic surgeon Dr. Génessier to use the facial skin of other women to reconstruct the face of his daughter Christiane, who was disfigured in a car accident he himself caused.

[26] In this paper, I choose not to take into consideration Dinoire's face transplant, because I'd rather explore fictional examples only.

[27] Carla Marcantonio, "Cinema, Transgenesis, and History in *The Skin I Live In*," in *Social Text 122*, vol. 33, no. 1, March 2015, pp. 49-70, p. 50.

[28] From this perspective, Vera's artificial skin is very different from the skinsuit sewn by the serial killer Buffalo Bill in Jonathan Demme's *The Silence of the Lambs* (1991).

[29] This interpretation in legitimized by the presence of drawings inspired to Bourgeois's *Femme maison* (1946-1947), representing the close bond between woman and house.

[30] Alfred Gell, *Wrapping in Images: Tattooing in Polynesia*, Clarendon Press, Oxford 1993, p. 39.

[31] Carla Marcantonio, "Cinema, Transgenesis, and History in *The Skin I Live In*," cit., p. 52.

[32] See Mary Flanagan, Austin Booth, *Introduction*, cit., pp. 3-5.

[33] The first version of an "electrical epidermis," tested at the University of Illinois, was laminated onto the skin in the same fashion as a temporary tattoo. See Tsuyoshi Sekitani, Martin Kaltenbrunner, Tomoyuki Yokota, Takao Someya, "Imperceptible Electronic Skin," *Information Display*, January/February 2014, http://informationdisplay.org/IDArchive/2014/JanuaryFebruary/FrontlineTechnologyImperceptibleElectronic.aspx, last visit 29 April 2018. On e-skin, see also Luca Santarelli, "New technology could turn your skin into a touch screen," *The Conversation*, July 3, 2016, http://www.businessinsider.com/new-technology-could-turn-your-skin-into-a-touch-screen-2016-7?IR=T, last visit 29 April 2018.

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Fiction de dispositif. Notre ethnographie : *La Jetée* (Chris Marker, 1962) et le diorama

Comment le film figure sa propre histoire…

Pour l'essentiel, les considérations qui vont suivre s'attachent à l'idée que le cinéma de fiction n'est pas uniquement un *objet* pour l'historien, mais aussi bien une *forme d'écriture de l'histoire* – de toutes les histoires : celle de l'art et des modes de représentation, comme on va s'employer à le montrer sur l'exemple de *La Jetée*, ou encore l'histoire de l'homme et de ses origines, parmi d'autres possibles. Il s'agira en l'occurrence, pour resserrer aussitôt l'hypothèse, d'envisager qu'un film de fiction est capable de *figurer sa propre historicité*, au premier chef par des choix de composition spécifiques.

Il faut reconnaître qu'une telle proposition ne va pas de soi notamment parce que, de prime abord, l'association entre les concepts d'histoire et de fiction semble paradoxale. En effet, l'histoire est censée s'occuper de ce qui a eu lieu dans le réel et le discours de l'historien porter sur des faits établis, « objectivement vrais ».[1] « Au-delà du vrai et du faux »,[2] la fiction, pour sa part, est supposée avoir lieu à l'endroit de l'imaginaire, et à cet endroit-là seulement. De sorte que, a priori, c'est un peu comme si l'histoire et la fiction évoluaient dans des directions incompatibles, s'instituant à tout le moins sur des scènes – c'est-à-dire, des réels – hétérogènes. Faute de temps (et d'espace) pour nuancer cette opposition théorique et discuter des modalités d'articulation entre l'histoire comme discipline et le(s) régime(s) de la fiction,[3] on s'en remettra à l'analyse filmique pour argumenter en faveur de l'hypothèse suivante : le film de fiction est capable de produire des élaborations formelles ayant valeur d'histoire, la particularité d'une telle historiographie étant d'ajouter, aux branches solidement constituées de la discipline, quelque chose comme une *histoire figurative*.

Ces préalables étant posés, il faut encore apporter quelques éclaircissements à propos de l'objet choisi pour incarner le principe de cette histoire figurative. *La Jetée* s'est d'abord imposé parce que ce « monument markérien » compose une archéologie du médium cinématographique déguisée en récit de science-fiction. Une telle archéologie implique, comme on l'imagine sans peine,[4] les expérimentations photographiques autour de la décomposition-recomposition analytique du mouvement menées, exemplairement, par Edweard Muybridge, Albert Londe, Etienne-Jules Marey, et consorts. Mais l'entreprise implique encore, quoique de manière moins évidente, le dispositif du diorama : de celui-ci, en effet, pour pointer le plus frappant, le film met en scène la variante naturaliste, lorsque ses héros sans nom se rencontrent au Muséum National d'Histoire Naturelle et que les figures humaines se trouvent incorporées au décor – toutes vitrines et autres cages en verre – dans lequel s'inscrivent les animaux empaillés.

Après avoir esquissé les grandes lignes de cette archéologie du cinéma sous-jacente à la fiction,[5] on considérera la manière selon laquelle le film construit sa relation avec le diorama ; on s'intéressera alors, en particulier, au lien entre les parois vitrées où prennent place les objets patrimoniaux du Muséum et une singulière cloison transparente que, par ailleurs, la fiction matérialise et met en scène.

Muybridge et Cie. Une archéologie du médium[6]

Le jeu du film autour de la décomposition du mouvement débute juste après la séquence de la destruction de Paris, au cours de la prétendue troisième guerre mondiale. Cinq « micro-analyses » de mouvement adviennent en l'occurrence, entre les premiers essais de voyage dans le temps et leur concrétisation, toutes se déroulant selon un protocole semblable. L'homme dont on nous raconte l'histoire est amené en salle de laboratoire, allongé dans un hamac, un masque posé sur ses yeux. Ensuite, l'expérience programmée dans la fiction débute, qui vise à propulser le sujet dans un autre temps (d'abord le passé, ensuite le futur).

L'expérimentation fictive prend alors la forme d'une transposition des expériences réellement initiées en photographie, au 19e siècle, aux fins de l'analyse du mouvement. À diverses reprises, une série de quelques instantanés représentant notre homme, pris à partir de points de vue légèrement différents et montés en raccords *cut*, décompose le mouvement de sa tête (figg. 80-82) ; la tête se déplace de la gauche vers la droite, bascule d'avant en arrière, ou atteste parfois une agitation plus désordonnée.[7] Mais toujours, le mouvement, haché, est rendu sous la forme d'une série de clichés qui en répètent la trajectoire en la fractionnant en ses étapes successives. Du travail de Muybridge, pour s'en tenir à celui-ci, le film réitère donc le principe de la décomposition du mouvement en plusieurs instantanés, pris depuis des points de vue plus ou moins distincts et qui, une fois juxtaposés, retracent l'évolution d'un mobile.[8] Si le dispositif de prise de vue de Muybridge, au reste variable, n'est pas reconduit à l'identique – Marker n'utilise sans doute qu'un seul appareil de prise de vue et l'intervalle spatio-temporel entre les prises n'est pas nécessairement systématisé, entre autres différences possibles –, la stratégie de figuration en œuvre dans ces séquences d'expérimentation l'évoque sans conteste. À cette nuance près que, cinéma oblige, les instantanés ne sont plus juxtaposés dans l'espace mais pris dans une succession temporelle, en conséquence de quoi, il appartient à la mémoire et non plus seulement à l'œil de reconstituer le mouvement.

Les travaux de Marey interviennent un peu plus tard dans le film, qui sous-tendent sa plus célèbre séquence : celle du réveil de l'héroïne, ainsi décrite par Bruce Kawin :

> *D'abord, la séquence est silencieuse. Un fondu nous conduit d'une image d'elle, endormie, jusqu'à une autre image d'elle en son sommeil. Puis, il se produit de plus en plus de fondus enchaînés, et l'on commence à entendre des pépiements d'oiseaux. Bientôt les fondus interviennent entre des images très similaires, de sorte que chacun d'entre eux semble construire un mouvement ténu, fragile, entre les images fixes. Le piaulement des oiseaux s'amplifie. C'est un peu comme si elle, ou le film, s'éveillait. Elle ouvre les yeux et bat des paupières.*[9]

Beaucoup a été écrit, déjà, à propos de cette séquence. Toutefois, il ne semble pas que l'on se soit soucié de remarquer combien elle transpose le passage entre la chronophotographie d'un Marey, et la reproduction cinématographique du mouvement. Pour mémoire, en 1883, le chronophotographe à plaque fixe du physiologiste français réunit « sur une même plaque une série d'images successives, représentant les différentes positions qu'un être vivant […] a occupé dans l'espace à une série d'instants connus. Par rapport au procédé de Muybridge, l'idée novatrice [*dixit* Michel Frizot] consiste à n'utiliser qu'un seul appareil, en tant qu'instrument d'enregistrement, et à superposer les images prises successivement par l'objectif unique et fixe ».[10] De telle sorte que la plaque photographique condense, en un tableau synoptique, tout un enchaînement de positions.

La « séquence aux oiseaux » de *La Jetée* – et le pépiement des oiseaux suggère quelque chose comme la parfaite incorporation fictionnelle de Marey[11] – propose de nouveau une série d'instantanés retraçant les différentes positions occupées par la jeune femme pendant son sommeil ; cependant, contrairement à ce qui se produisait avec le « prisonnier dans son hamac », ces positions sont maintenant reliées par un jeu de fondus enchaînés. Comme chez Marey, l'intervalle entre les positions successives d'un mobile est désormais compris, figuré dans l'image (quand bien même, aux sillages blanchâtres de la chronophotographie, *La Jetée* substitue son méli-mélo de fondus enchaînés).

De Marey, en somme, Marker reprend le principe qui fait de l'intervalle une jointure plutôt qu'une coupure, et du mouvement décomposé, un ensemble de positions reliées les unes aux autres plutôt qu'une série d'étapes dissociées. De la même façon qu'au précédent, il est nécessaire d'évoquer une transposition des travaux du physiologiste puisque, outre l'écart irréductible entre la visée tantôt scientifique, tantôt narrative des images, ce qui apparaissait juxtaposé sur la plaque photographique de Marey se trouve, dans le film de Chris Marker, réinscrit dans une succession temporelle.

La présence du diorama, au cœur de l'archéologie du médium proposée par *La Jetée*, n'est pas tout à fait du même ordre que celle des expérimentations photographiques de la fin du 19^e siècle évoquées jusqu'à présent. Car si Muybridge et autres analystes du mouvement peuvent être logiquement rapportés aux origines du cinéma, on ne saurait réduire le diorama à un tel rôle, pour cette raison au moins qu'il constitue davantage un dispositif avec lequel le cinéma s'articule – et à partir duquel il est pensable, on y reviendra en conclusion – que la condition technique de son invention ou la recette de son mouvement.

Dans la séquence de visite au Muséum, on retrouve en premier lieu le diorama naturaliste[12] dans son état primitif et littéral (fig. 83), à savoir « une simple cage en verre à quatre côtés dans laquelle on exposait des spécimens d'animaux ».[13] Mais à l'évidence, le terme qualifie aujourd'hui un dispositif autrement complexe, que Dominique Séréna-Allier, reliant alors ses « espèces » naturaliste et ethnographique, détaille de la façon suivante :

> *[le diorama] désigne la représentation, dans un lieu clos, d'un paysage naturel ou anthropisé ou d'une scène d'intérieur relevant d'une autre temporalité ou d'un autre espace géographique […] Dès qu'il intègre le monde des musées, ce dispositif prend la forme d'une mise en espace, en perspective d'objets provenant de collections patrimoniales, associés quelquefois à des mannequins mais toujours contextualisés grâce à un décor peint ou reconstitué à partir d'éléments architecturaux ou environnementaux plus ou moins authentiques. Souvent protégé d'une vitre, cet ensemble devient microcosme et se veut vériste […] Il propose au visiteur une narration visuelle se référant à un passé plus ou moins proche ou à un ailleurs étrange, à observer à travers une fenêtre largement ouverte […] C'est dans le dernier tiers du XIX^e siècle que les dioramas s'imposent en nombre en particulier dans les musées d'histoire naturelle, d'histoire, d'arts décoratifs et dans ceux d'ethnographie nationale ou régionale alors émergents, jusqu'à même devenir inhérents à ces institutions [l'auteur ajoute ensuite, à propos du diorama ethnographique] Son modèle, pour les musées français, provient de ces scènes typiques peuplées de mannequins grandeur nature en costume populaire, figés dans un rituel social ou dans leurs activités traditionnelles, réalisées d'abord dans les musées d'Europe du Nord […] puis reprises et diffusées dans des expositions universelles notamment celles organisées à Paris en 1867 puis 1878.*[14]

Dans *La Jetée*, tout bien considéré, les vitrines ne confinent pas seulement les « bêtes éternelles » mais deux sortes de créatures immobiles, dont la fixité se fait écho bien qu'elle ressortisse à différents médiums : d'une part, les animaux taxidermisés, et d'autre part, les êtres humains photographiés, lesquels apparaissent à plusieurs reprises *derrière* une paroi vitrée – comme mis en vitrine et constitués en patrimoine à leur tour (fig. 84). En conjuguant ainsi la fixité (photographique) des personnages, autant de mannequins à taille humaine en costume populaire du 20^e siècle, à celle (thanatographique) des bêtes muséales, tout en insistant sur les parois de verre au-travers desquelles tout cela est vu, Marker fait de la séquence au Muséum un diorama d'un nouveau genre (filmo-photographique[15]), montrant deux spécimens de l'espèce humaine, de type caucasien, représentés dans cette activité traditionnelle – pour bien des ethnies et sociétés en tout cas – qu'est la visite au Muséum d'Histoire Naturelle.

Je souligne au passage que, si le décor peint au fond du diorama est conçu pour s'inscrire dans un cadre muséal, dans *La Jetée*, en vertu d'une condensation ou d'une refonte assez rusée, c'est le Muséum lui-même qui, substitué au milieu que reconstituent traditionnellement l'arrière-plan peint et les éléments environnementaux du diorama, officie comme décor de la représentation.

Le jeu de *La Jetée* avec le diorama ne s'arrête pas là, le rapport de l'un à l'autre s'avère bien plus complexe. Car au-delà de ces vitrines et cages vitrées formant l'essentiel du mobilier du Muséum, deux énigmatiques cloisons transparentes apparaissent *par ailleurs*, en d'autres moments du film – qui sont rendues visibles, en toute logique, par la dénonciation et l'annulation partielle de leur transparence. Ces parois surgissent en avant-plan, telles deux vitres interposées entre les personnages et le spectateur (parfois entre les personnages eux-mêmes), chacune fonctionnant comme un instrument de délimitation spatio-temporelle. La première de ces cloisons semi-transparentes, sur laquelle le héros du film vient buter au terme de la promenade au Jardin des plantes, forme une frontière entre le passé et le présent (fig. 85), alors que la seconde, liée à la rencontre du même héros avec l'humanité future, marque la séparation entre le présent et l'avenir (fig. 86).

Il a été spécifié plus haut que les parois de verre des dioramas contiennent des « scènes relevant d'un autre temps ou d'un autre espace » mais il n'est sans doute pas inutile d'insister sur le rôle primordial de la vitre dans le dispositif, qui à la fois signifie l'institution de chaque scène en objet pour le regard (en quelque sorte convié à entrer dans la vitrine), tout en marquant la différence entre l'espace-temps du microcosme reconstitué et celui du spectateur (qui se tient de l'autre côté de la vitre). Or, il me semble que la cloison transparente mise en scène dans la fiction markérienne assume un rôle comparable à la vitre du diorama[16] : cette vitre figurée constitue à la fois un seuil temporel (où s'effectue le partage entre des espaces-temps distincts), et un seuil perceptif (qui règle, structure, bref, définit l'expérience du regard comme traversée).

Du diorama au cinéma (en passant par Panofsky) : histoires de vitres

Je formulerai, en guise de conclusion, une hypothèse relative à l'importance du diorama pour la perception – et dans la culture visuelle – occidentale, cette hypothèse justifiant, en fin de compte, la place accordée à ce dispositif dans l'archéologie markérienne.

Sans remonter jusqu'à la fenêtre ouverte par Leon Battista Alberti (qui aurait néanmoins toute sa place parmi ces histoires de vitres), je voudrais revenir en particulier sur le « plan transparent » imaginé par Erwin Panofsky afin de théoriser l'expérience du regard face au tableau en perspective de la Renaissance. On se souvient que, pour l'historien d'art, dans une véritable « vision perspective », la surface de représentation du tableau n'est plus « […] le mur ou le panneau sur lesquels on a rapporté les formes de figures ou de choses singulières, mais redevient au contraire ce *plan transparent au travers duquel, comme on veut nous le faire croire, notre regard passe pour plonger dans un espace*, fût-il, cet espace, encore limité de tous côtés ».[17]

Contrairement à la vitre du diorama, le plan transparent invoqué par Panofsky n'existe pas autrement qu'en théorie : l'expression de « plan transparent » indique le déni de la surface de représentation sur la base duquel s'engage le commerce esthétique entre le regard et le tableau. Ce qui importe, dans la fiction théorique échafaudée par l'historien de l'art, est que ce plan transparent conditionne l'entrée du regard dans la profondeur illusoire de l'image, au-delà de la surface de représentation. En d'autres termes, le plan transparent constitue le ressort primordial de ce que l'on ne qualifiait pas encore d'immersion spectatorielle.

Si la fiction théorique conçue par Panofsky aux alentours des années 1920-1930 concerne en premier lieu le dispositif du tableau en perspective, elle n'est cependant pas sans rapport avec le diorama, dont la vitre réelle et non plus virtuelle implique effectivement – conformément à l'étymologie du terme : « voir à travers » – que le regard s'éprouve comme une expérience de traversée de la transparence. L'historien d'art en avait-il conscience ? À ma connaissance, rien ne permet de le supposer. Mais il n'en reste pas moins que le diorama incarne, concrétise ce principe du « plan transparent au-travers duquel le regard passe pour plonger dans un espace, etc. ».

Si l'on se tourne maintenant vers le dispositif cinématographique et les théories qui lui sont attachées, on est en droit de supposer que la cloison transparente y poursuit sa dématérialisation, en prenant la forme du quatrième mur – cette autre fiction de plan transparent qui, à l'instar de la vitre du diorama, sépare le monde de la représentation, de l'espace spectatoriel. On n'ignore certes pas que le quatrième mur est susceptible d'être révélé (exemple classique, par le regard d'un personnage prétendument adressé au spectateur), ce qui constitue une manière de rendre sensible (sinon visible) la cloison transparente en laquelle il consiste. Cas échéant, c'est l'adhésion du spectateur à la fiction qui se trouve remise en question.

Surtout, il est remarquable que, dans la théorie panofskienne aussi bien que dans la théorie du cinéma, la vitre virtuelle fonctionne plus ou moins de la même façon qu'au sein du dispositif du diorama : c'est, pour le dire aussi net que possible, une « petite médiatrice » qui règle la position du spectateur vis-à-vis de la représentation (dont elle matérialise par ailleurs le seuil), et conditionne son adhésion à celle-ci.

En fin de compte, le diorama se laisse interpréter comme un dispositif technique *et* théorique emblématique. En effet, l'agencement ou l'articulation qu'il instaure entre ces différents paramètres que sont la cloison, le seuil, la transparence et la vitre, est rien moins qu'un schème qui sous-tend la perception occidentale. En d'autres termes, par-delà la variété des dispositifs qui ont pu mettre en forme et décliner la transparence d'une paroi, de matérialisation en dématérialisation, son principe apparaît, dans la culture visuelle occidentale, comme un rouage primordial de l'expérience du regard face à la représentation ; une expérience qui, pour reprendre les mots de Hans Belting, « […] permet au spectateur de rester présent 'ici', avec son corps, tout en se rendant, de façon désincarnée, 'là-bas', en des lieux où seul peut parvenir le regard ».[18]

Une remarque encore, à propos de l'intitulé de ce texte. Par définition, le musée d'ethnographie,

> *Plus large dans son programme qu'un musée d'art […] est essentiellement le conservatoire de la civilisation considérée dans son ensemble : techniques fondamentales et industries, alimentation, habillement, parures, objets rituels, magiques, juridiques, productions artistiques.*[19]

Si *La Jetée* œuvre dans la perspective de « notre ethnographie », c'est parce qu'en figurant, d'une part, les conditions d'apparition de la représentation cinématographique, d'autre part et plus largement, l'importance de la cloison transparente (réelle ou virtuelle) en matière d'illusion représentative et d'identification spectatorielle, le film s'offre comme le laboratoire-conservatoire du façonnage du regard en Occident. En dernière instance, au-delà de la « simple » archéologie du médium cinématographique, *La Jetée* esquisse, *par fiction et composition interposées*, une brève histoire des modalités de la perception occidentale post-renaissante.[20]

Illustrations

80-82. L'analyse du mouvement en Edward Muybridge.
83. La séquence de visite au Muséum (*La Jetée*, Chris Marker, 1962).
84. Le vitrine (*La Jetée*, Chris Marker, 1962).
85. Les cloisons transparentes (*La Jetée*, Chris Marker, 1962).
86. Les cloisons transparentes (*La Jetée*, Chris Marker, 1962).

Notes

[1] Sur ce point, il faut relire Antoine Prost : « Nous devrons pousser plus loin l'analyse, car l'idée d'une vérité objective qui repose sur des faits demande plus ample discussion. Elle reste cependant constitutive de l'histoire à un premier niveau », dans *Douze leçons sur l'histoire*, Seuil, Paris 1996, p. 58.

[2] Cf. Jean-Marie Schaeffer, *Pourquoi la fiction*, Seuil, Paris 1999, p. 210 : « […] pour reprendre une formulation de Gérard Genette, ce qui caractérise la fiction est qu'elle 'est au-delà du vrai et du faux', c'est-à-dire qu'elle met entre parenthèses la question comme telle de la valeur référentielle et du statut ontologique des représentations qu'elle induit ».

[3] Pour une théorisation du/des régime(s) de la fiction, on pourra se reporter à l'ouvrage de Jean-Marie Schaeffer référencé supra.

[4] Je prolonge au demeurant une idée énoncée, de manière différente, par Roger Odin dans « Le film de fiction menacé par la photographie et sauvé par la bande-son (à propos de *La Jetée* de Chris Marker) », dans Dominique Château, André Gardies, François Jost (sous la direction de), *Cinémas de la modernité : films, théories*, Klincksieck, Paris 1981. L'œuvre de Chris Marker a été tant commentée que je me contente, pour d'autres analyses et une vaste

bibliographie, de renvoyer au numéro 6 de *Théorème* : Philippe Dubois (sous la direction de), « Recherches sur Chris Marker », PSN, 2002. Parmi les publications récentes, voir l'ouvrage de Janet Harbord, *Chris Marker - La Jetée*, Afterall Books, « one work », 2009, ainsi que le catalogue de l'exposition Christine Van Assche, Raymond Bellour, Jean Michel Frodon (sous la direction de), *Chris Marker, les 7 vies d'un cinéaste*, Cinémathèque française, mai 2018.

[5] Une précision s'impose : l'archéologie en question, aussi bien que la relation du film avec le diorama, sont des propositions interprétatives. Ces propositions ne sont pas fondées sur des indications livrées par Chris Marker – dont le lien au musée d'ethnographie est néanmoins patent : voir *Les Statues meurent aussi* – mais sur le travail de l'analys(t)e. Cela étant, il n'est pas impossible que les archives déposées à la Cinémathèque française en 2013 – le Fonds Marker, en cours d'inventaire – contiennent des éléments allant dans le sens de l'interprétation développée au long de ce texte. Remarquons que, le cas échéant, ces « éléments de preuve » ne sauraient se substituer à la démonstration opérée par l'analyse.

[6] Quelques pistes bibliographiques choisies parmi l'ensemble des écrits consacrés à la décomposition analytique ou à la recomposition synthétique du mouvement et à ses grands artisans : outre l'ouvrage de référence de Marta Braun, *Picturing Time. The Work of Etienne-Jules Marey*, University of Chicago Press, Chicago-London 1992, on renverra, d'une part, pour une réflexion sur la construction historique du paradigme « mouvement *vs* fixité », à Maria Tortajada, « Photographie/cinéma : paradigmes complémentaires du début du XXème siècle », dans Laurent Guido, Olivier Lugon (sous la direction de), *Fixe/animé. Croisements de la photographie et du cinéma au XXe siècle*, L'Age d'Homme, Lausanne 2010, pp. 47-61 ; d'autre part, pour une discussion récente des travaux de Marey et Muybridge, à Philippe-Alain Michaud, « La poétique des mobiles », dans *Sur le film*, Éditions Macula, Paris 2016, pp. 163-179.

[7] Dans le détail, la 1ère décomposition/recomposition opère en trois instantanés, comme la 2ème et la 3ème. La 4ème complique le problème, en montant à la suite une dizaine d'instantanés qui fonctionnent deux à deux ; chaque couple d'images analyse un bref déplacement du visage, et tous ces couples mis bout-à-bout rendent compte d'un mouvement plus complexe : la tête est secouée, au lieu de décrire un trajet unidirectionnel. Enfin, lors de la 5ème occurrence, quatre instantanés se succèdent. Si l'on quitte le photo-roman (c'est-à-dire le film) pour se reporter au ciné-roman (donc au livre intitulé *La Jetée*, Zone Books, New York 1992), on remarquera que celui-ci ne reprend qu'une seule de ces diverses séries de décomposition/recomposition du mouvement : six instantanés se déroulent sur une double page et ils me semblent, là encore, fonctionner deux à deux. On trouvera davantage de précisions sur ces questions d'analyse du mouvement dans ma thèse de doctorat en études cinématographiques : *L'Ensemble visuel et l'idée de manque. Essai sur la relation entre film et photo*, soutenue à l'Université Paris 3 Sorbonne Nouvelle, en 1999 (cf. chapitre VIII, pp. 288-343).

[8] « En quoi consiste la 'décomposition' du mouvement par Muybridge ? Il s'agit plutôt d'une juxtaposition non concertée d'instantanés multipliant les attitudes, rangés en séquence chronologique. La vitesse du processus photographique intervient à deux niveaux : vitesse de la prise de vue (1/1 000 de seconde si nécessaire) et vitesse de la succession d'instantanés dans un laps de temps très court (rafale) ». Cf. Michel Frizot, « Vitesse de la photographie. Le mouvement et la durée », dans M. Frizot (sous la direction de), *Nouvelle Histoire de la Photographie*, Adam Biro, Milan 1994, pp. 243-257, citation p. 248. Sur la postérité de Muybridge dans le champ de l'art (au-delà du cinéma), on se reportera au texte de Guillaume Le Gall, « Le temps suspendu du mouvement – Muybridge, un modèle pour l'art conceptuel », dans *Fixe/animé. Croisements de la photographie et du cinéma au XXe siècle*, cit., pp. 373-384.

[9] Je traduis ces quelques lignes : « *At first the sequence is silent. There is a dissolve from one still to her sleeping to another still of her sleeping. Then there are more dissolves, and one begins to hear the sounds of birds. Soon the dissolves are between stills that are very similar to each other, as if each dissolve bridged a painfully slight movement between still positions. The birds become very loud. It is as if she, or the film, wakes up. She opens her eyes and blinks...* ». Cf. Bruce Kawin, «Time and stasis in *La Jetée* », dans *Film Quarterly*, vol. XXXVI, n° 1, automne 1982, University of California Press, Berkeley, pp. 15-20, citation p. 18.

[10] Michel Frizot, « Vitesse de la photographie. Le mouvement et la durée », cit., p. 249. Dans le même article, p. 250, l'auteur rappelle que, aux alentours de 1888, Marey délaissera la plaque fixe au profit de la chronophotographie sur pellicule mobile : « D'abord réalisé avec une plaque de verre […] le procédé bénéficie en 1890 de l'invention toute récente de la pellicule

de Celluloïd dont Eastman a muni le Kodak. Le premier ‘film’ de Marey (une main qui s’ouvre et se ferme) est publié en juillet 1889 ».

[11] De même que les battements de cœur du « héros » entendus à force reprises lorsque les voyages dans le temps débutent, puisque Marey n’a pas seulement photographié quantité d’oiseaux et publié sur leur vol, mais également écrit sur les battements du cœur : voir par exemple son article « Loi qui préside à la fréquence des battements du cœur », *Comptes rendus hebdomadaires des séances de l’Académie des Sciences*, 1861, 53, pp. 95-98. J’ajoute enfin, pour rendre justice à la subtilité de la figuration filmique, que ces battements de cœur marquent aussi bien l’incorporation fictionnelle de Muybridge : les battements que nous percevons amplifiés, en accompagnement de la décomposition des mouvement de tête du héros, ne laissent pas d’évoquer la course du cheval – d’un galop, l’autre.

[12] Deux remarques (sur le diorama, le cinéma et les animaux empaillés) : premièrement, je m’en tiens presque exclusivement au diorama naturaliste et à son « homologue » ethnographique, laissant sciemment de côté le dispositif de Daguerre, dont la technique, les trucs et les enjeux diffèrent. Deuxièmement, sur la relation entre cinéma et taxidermie, voir Mark Alvey, « The Cinema as Taxidermy : Carl Akeley and the Preservative Obsession », dans *Framework. The Journal of Cinema and Media*, vol. 48.1, 2007, pp. 23-45 ; ainsi que Teresa Castro, « Beyond the Taxidermic Paradigm: from Botanical Collections to Cinematic Herbaria», conférence prononcée lors de la XXV Udine International Film Studies Conference : *Exposing the Moving Image: the Cinematic Medium across World Fairs, Art Museums, and Cultural Exhibitions,*, Université de Udine - Gorizia, Italie, 1 mars 2018.

[13] Stephen Christopher Quinn, « Anatomie d’un diorama », dans K. Dohm, C. Garnier, L. Le Bon, F. Ostende (sous la direction de), *Dioramas*, catalogue d’exposition, Flammarion, Palais de Tokyo 2017, p. 96.

[14] Cf. Dominique Séréna-Allier, « Les dioramas du Museon Arlaten : de la lecture critique au projet de conservation/restauration ‘in situ’ », *In Situ – Revue des patrimoines*, 29 | 2016 : « Ensembles mobiliers, industriels, techniques. Connaissance, protection, conservation, présentation au public », mis en ligne le 8 juillet 2016, http://insitu.revues.org/13063 ; DOI : 10.4000/insitu.13063, dernier accès 31 décembre 2018.

[15] Il est à noter que Marker, en combinant cinéma et photographie, réaffirme le caractère « multi-médium » du diorama, qui associe exemplairement la sculpture (à laquelle la taxidermie se laisse rapporter selon Donna Haraway, cf., « Le patriarcat de Teddy Bear – Taxidermie dans le jardin d’Éden », New York 1908-1936, dans K. Dohm, C. Garnier, L. Le Bon, F. Ostende (sous la direction de), *Dioramas*, cit., p. 91), l’installation (voir la scénographie des animaux et des éléments environnementaux) et la peinture (celle du décor en arrière-plan).

[16] De manière inverse, Philippe-Alain Michaud aura pu voir dans les vitrines des dioramas du National Museum of American History de New York, conçues par l’anthropologue Franz Boas à partir de 1896, de « véritables promenades pré-cinématographiques ». Cf. *Sur le film*, cit., p. 33.

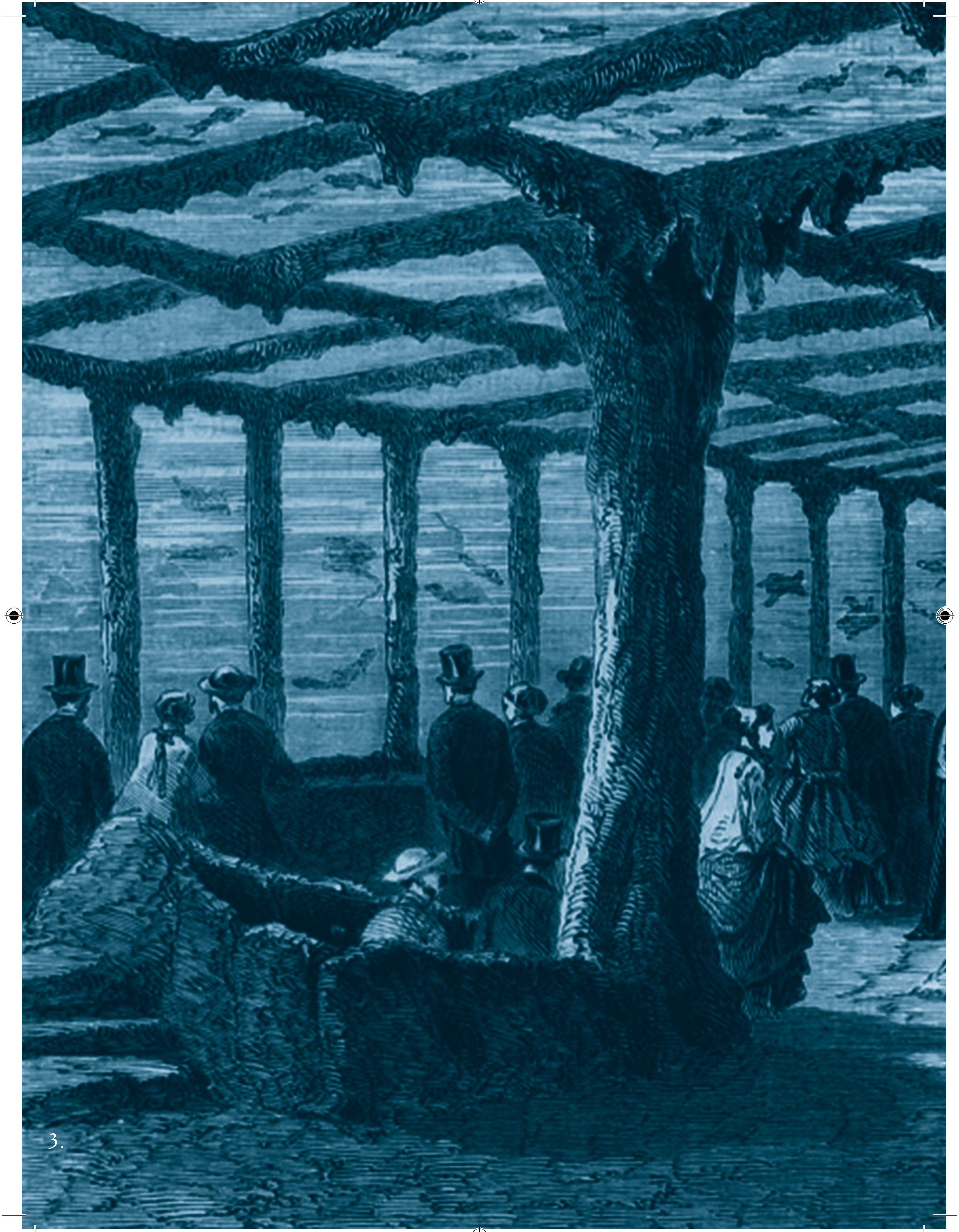
[17] Cf. Erwin Panofsky, *La Perspective comme forme symbolique*, Les Editions de Minuit, Paris 1975, p. 121 (c’est moi qui souligne). L’auteur avait pris le soin de préciser bien en amont, en p. 38, en quoi consiste une « véritable » vision perspective ; après avoir évoqué la fenêtre d’Alberti, il écrit : « […] nous parlerons donc de vision perspective quand, dans une œuvre d’art, la surface (c’est-à-dire ce qui sert de support à l’art pictural ou à l’art plastique et sur quoi l’artiste, peintre ou sculpteur, rapporte les formes des objets et des figures) est niée dans sa matérialité et qu’elle se voit réduite à n’être plus qu’un simple ‘plan du tableau’ sur lequel se projette un ensemble spatial perçu au travers de ce plan […] ».

[18] Cf. Hans Belting, « La fenêtre et le moucharabieh : une histoire de regards entre Orient et Occident », dans Emmanuel Alloa (sous la direction de), *Penser L’image*, Les presses du réel, Dijon 2010-2011, p. 147.

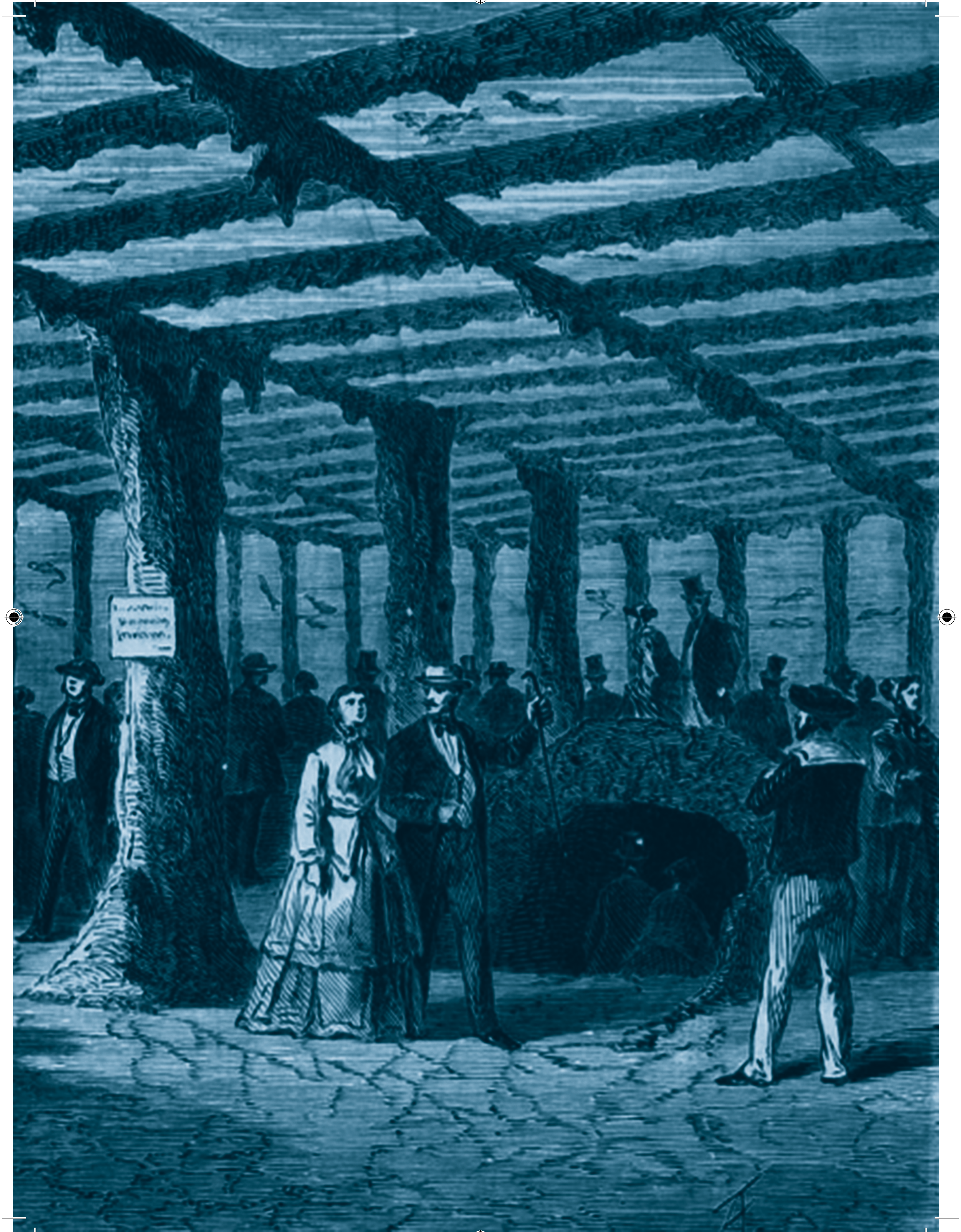
[19] Cf. Nina Gorgus, *Le Magicien des vitrines – Le muséologue Georges-Henri Rivière*, (*Der Zauberer der Vitrinen : zur Museologie Georges-Henri Rivière*, 1999), ed. Maison des Sciences de l’Homme, Paris 2003, p. 54.

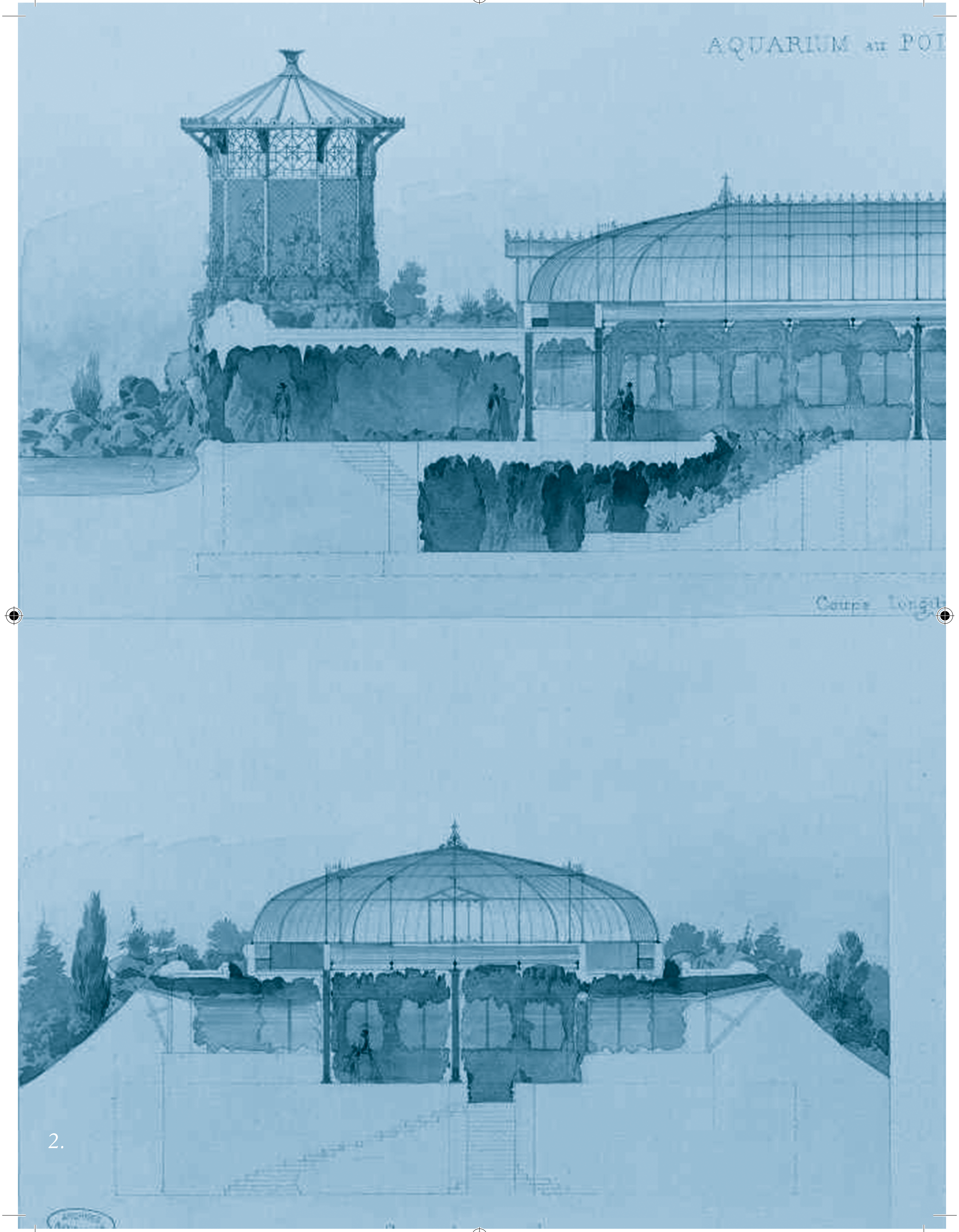
[20] Pour une comparaison stimulante entre conception occidentale (étalonnée, pour lors, sur le principe de la fenêtre plutôt que sur celui de la transparence… mais ces principes sont voisins) et conception orientale du regard, je renvoie au texte susmentionné d’Hans Belting, « La fenêtre et le moucharabieh : une histoire de regards entre Orient et Occident », dans Emmanuel Alloa (sous la direction de), *Penser L’image*, cit., pp. 145-173.

Exposing the Moving Image

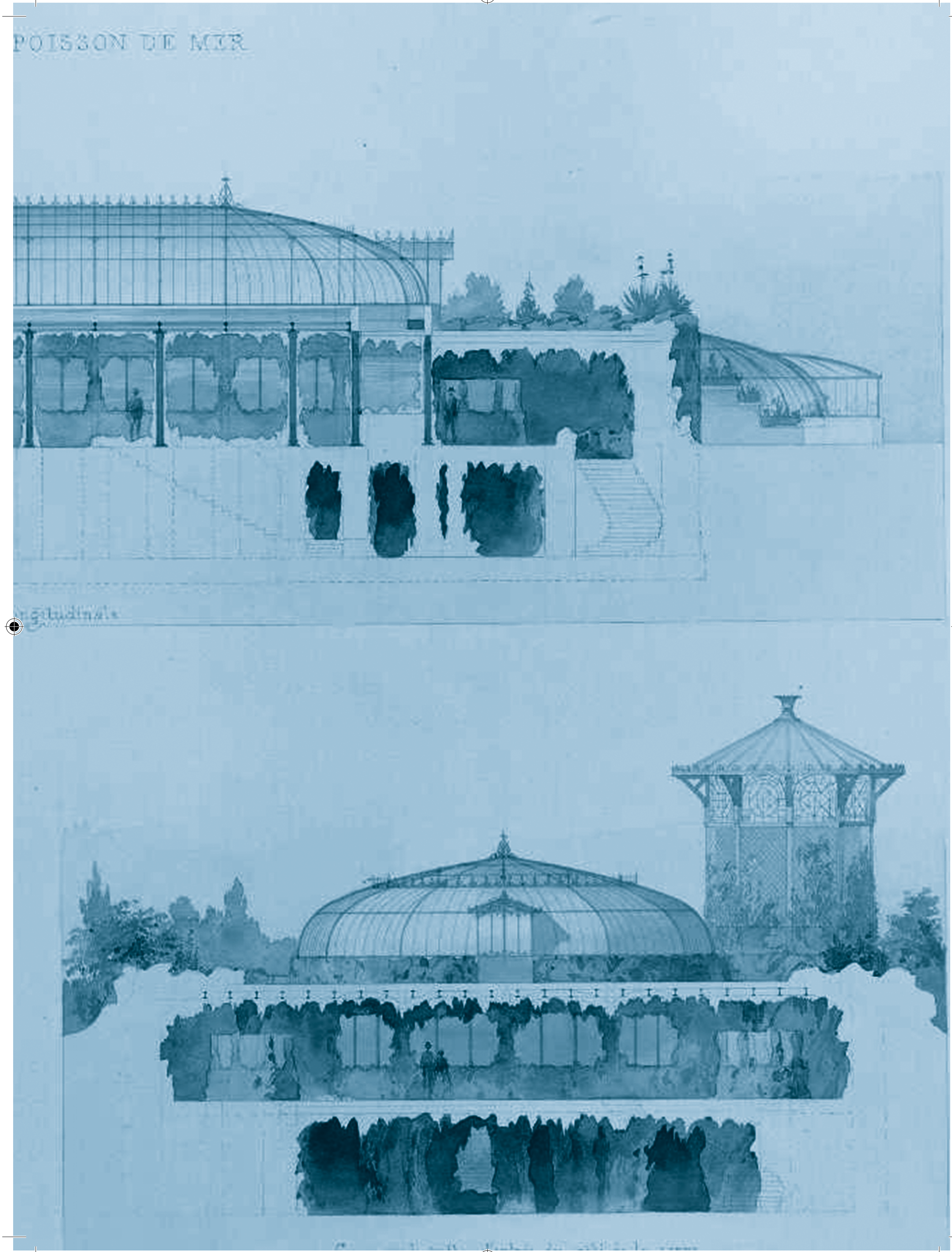


3.




AQUARIUM au POI
Coupe longit

2.


POISSON DE MER
ngitudinale

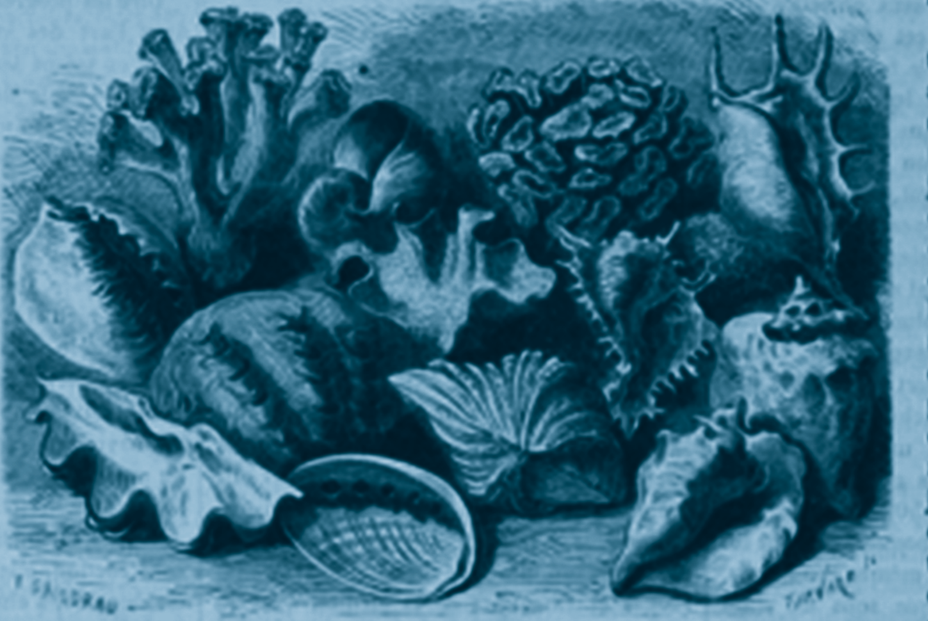
ingénieux, le second le plus répandu; le dernier le plus pratique. Outre les machines motrices par la vapeur et le gaz, nous avons encore les machines à pression d'eau, à air comprimé, à air chaud et à ammoniaque, à peu près inconnues il y a dix ans, aujourd'hui à l'étude partout, et employées déjà en mainte occasion.

Nous trouvons une belle machine électrique de M. Van Malderen, semblable à celles qu'il a fournies à l'administration des phares. Les Anglais ont exposé plusieurs machines électro-magnétiques, mais celle de la Compagnie de Birmingham n'est qu'une contrefaçon de la machine de l'Alliance (Compagnie dont M. Malderen est le contre-maître) et sa lumière n'a ni la puissance ni la régularité de celle de la machine française. MM. Wilde et Ladd ont inventé des machines basées sur des principes différents qui sont, au point de vue théorique, de véritables merveilles, mais au point de vue industriel, la nécessité de les faire tourner avec une vitesse de deux à trois mille tours par minute, en restreint singulièrement l'emploi, tandis que la machine de l'Alliance, ne faisant que quatre cents tours, se trouve dans les règles ordinaires de vitesse et réalise dans les meilleures conditions possibles la transformation du mouvement en lumière.

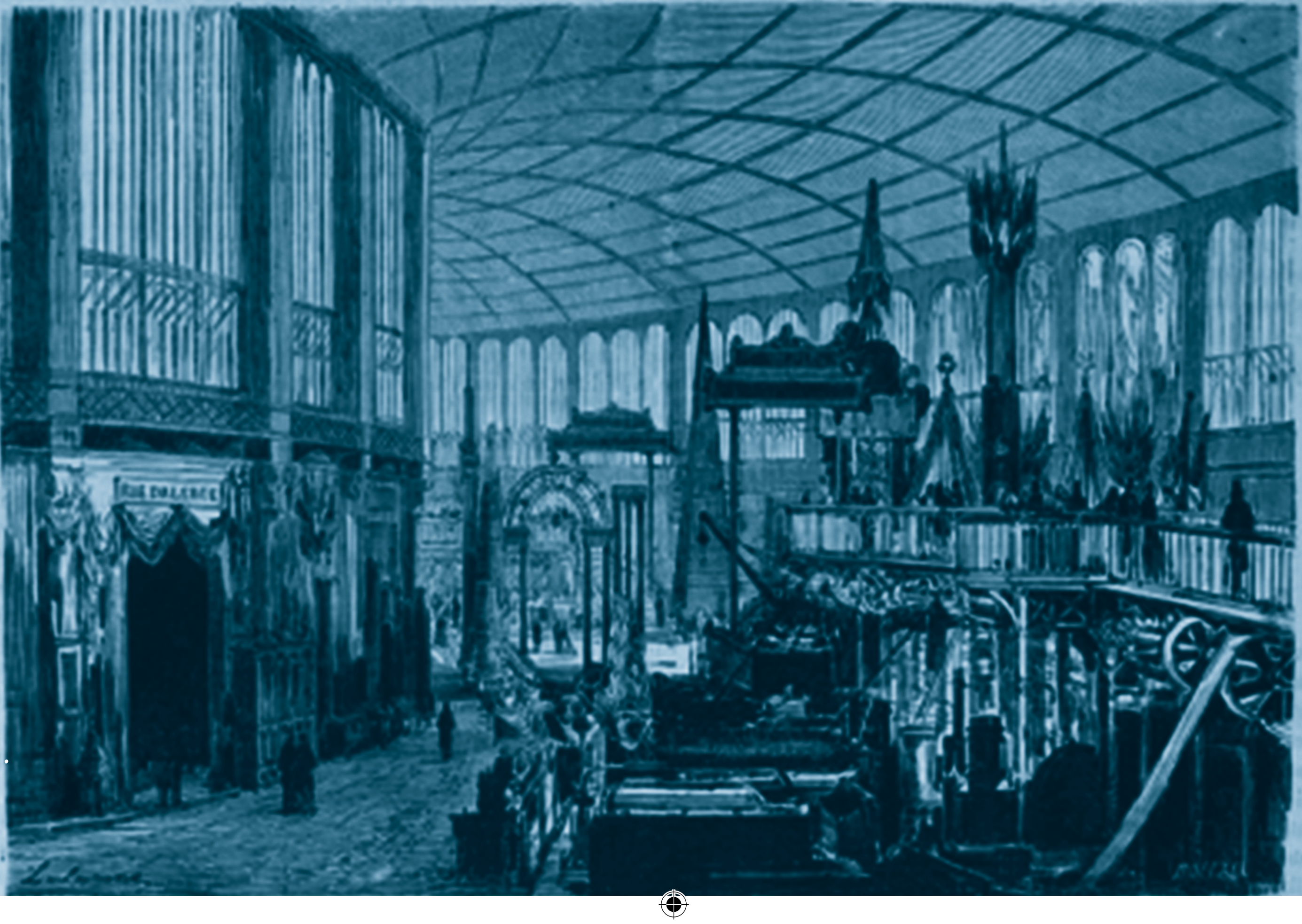
M. Taurines a obtenu la médaille d'or pour ses dynamomètres et bascules à ressort. Certes ces dynamomètres, destinés à mesurer la force d'un arbre de couche, sont excessivement ingénieux, mais nous avouons préférer la vulgaire bascule à sa balance à ressort; il reste toujours un doute pour l'esprit sur l'exactitude des divisions tracées sur le cadran où une aiguille mobile marque le poids.

Nous arriverons au matériel des mines après avoir traversé la carrosserie sur laquelle nous ne dirons qu'un mot. Le jury, fidèle à son système de donner les grosses récompenses aux grosses compagnies, a gratifié l'administration des omnibus d'une médaille d'or; a-t-il voulu récompenser l'excellent service des lignes, dans ce cas rien de mieux; mais le jury n'avait à apprécier que les mérites de la voiture-omnibus exposée, et elle ne méritait pas une médaille de bronze. Les omnibus de province, du Havre, par exemple, ont l'air de voitures de maître à côté de ceux de Paris, et cela, sans parler des omnibus-salons suédois. Ah! que nous avons à faire pour posséder et même pour connaître le comfort!

Parlons vite des chemins de fer, là, au

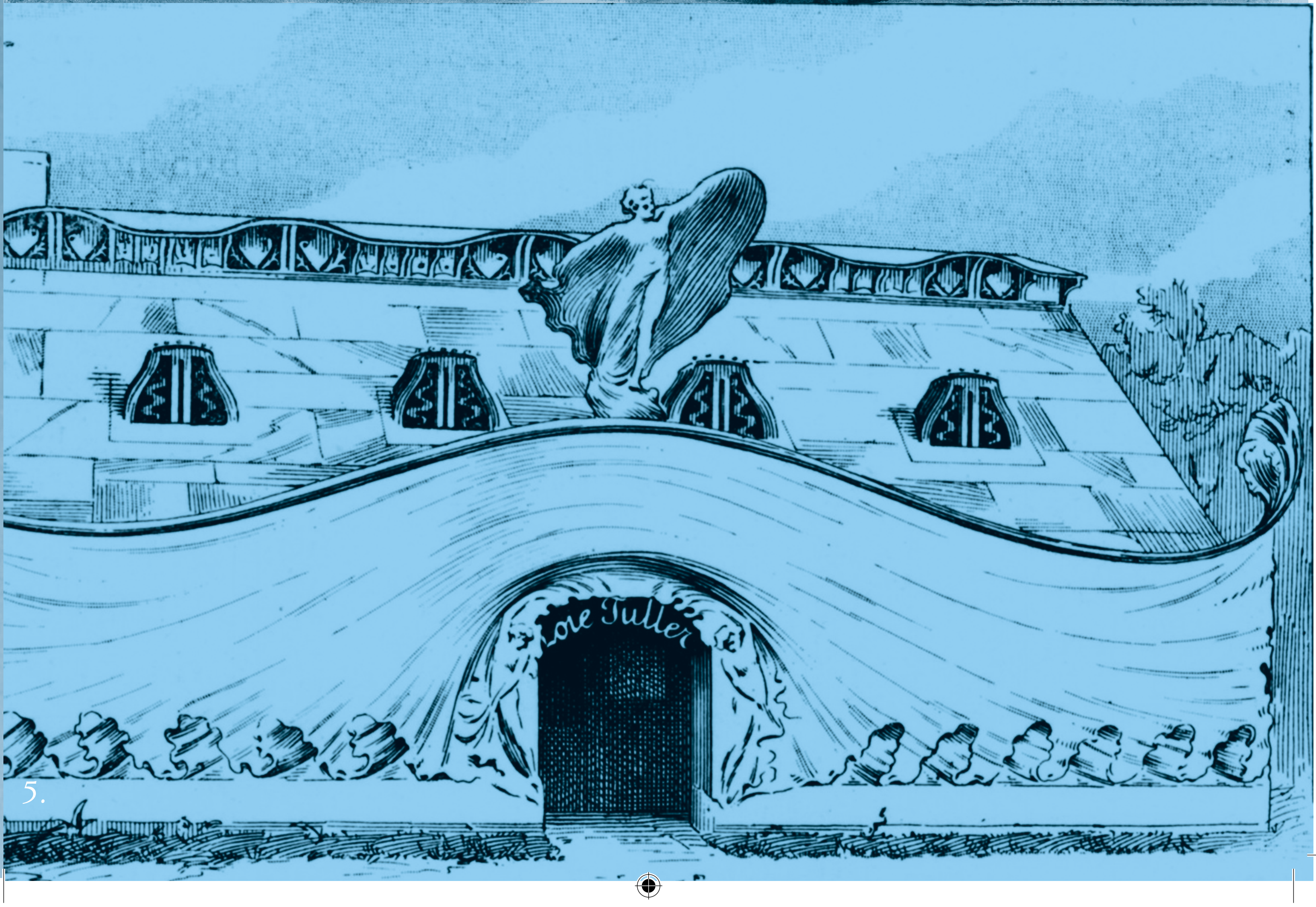


COQUILLAGES ET CORAUX. — Dessin de M. Guldrau.



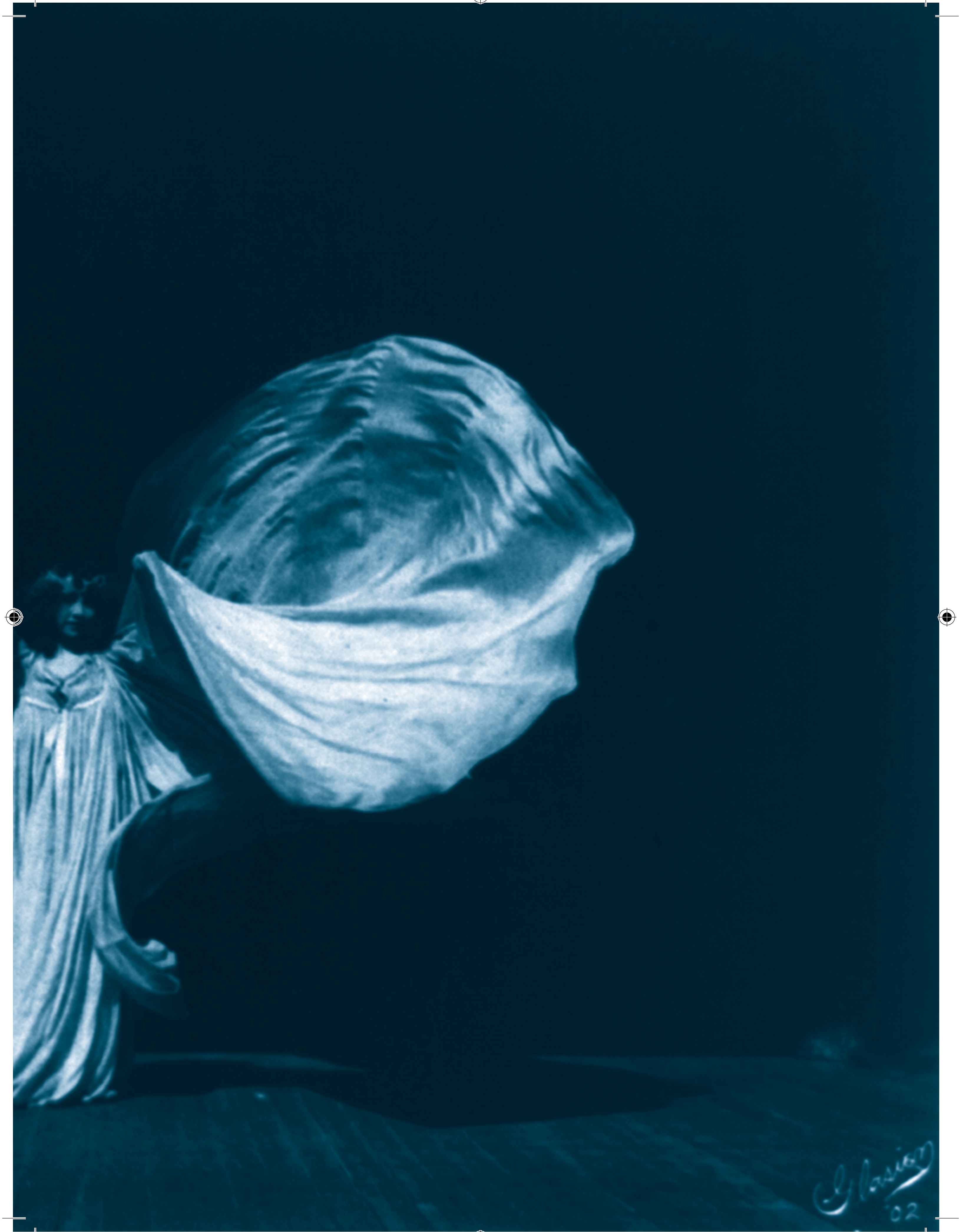
1.

4.


Loie Fuller

5.

6.


Glasier
'02

7.

9

8.

1

9.

10.

Filmoteca
de Catalunya

11.

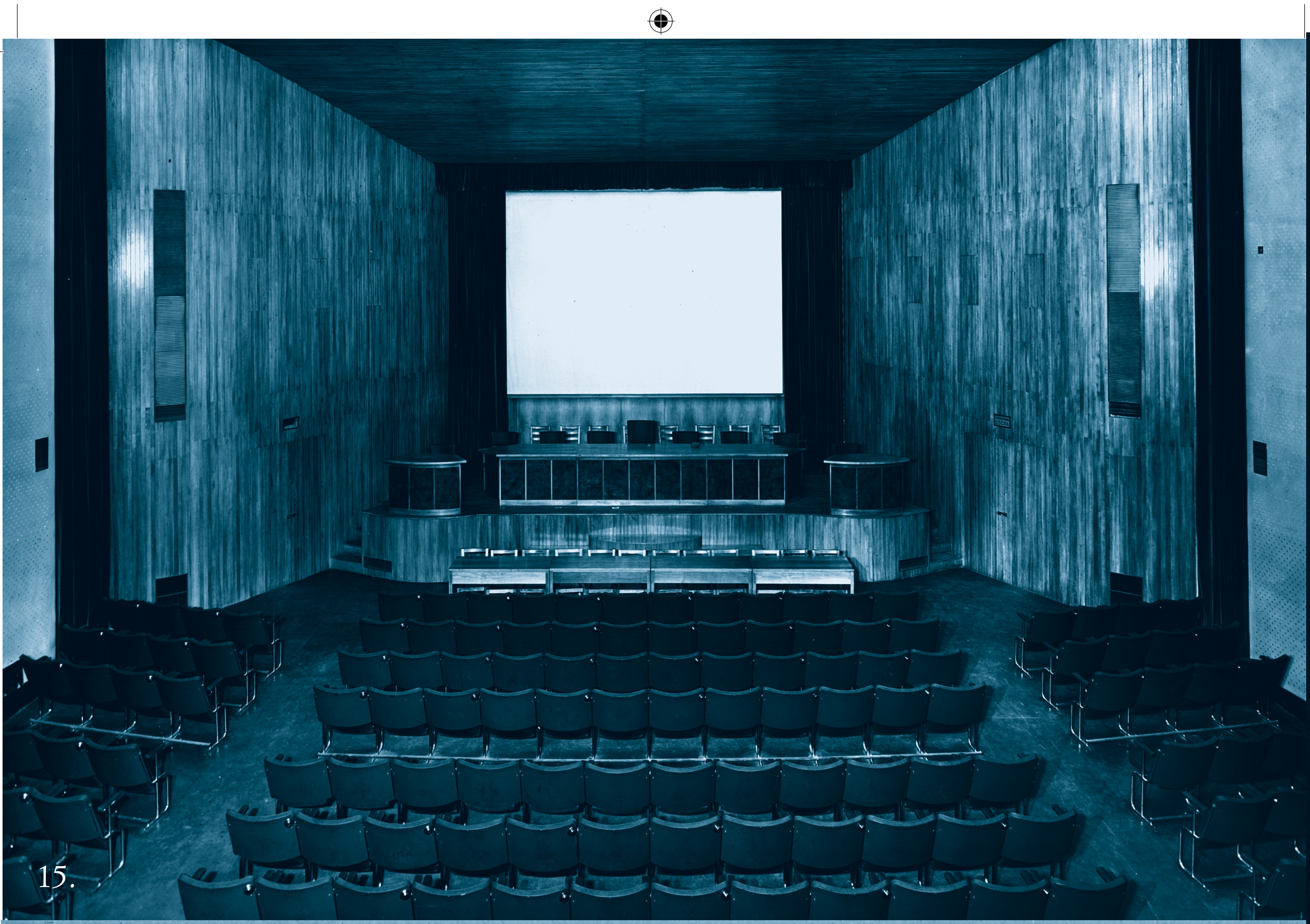
12.

Filmoteca de Catalunya

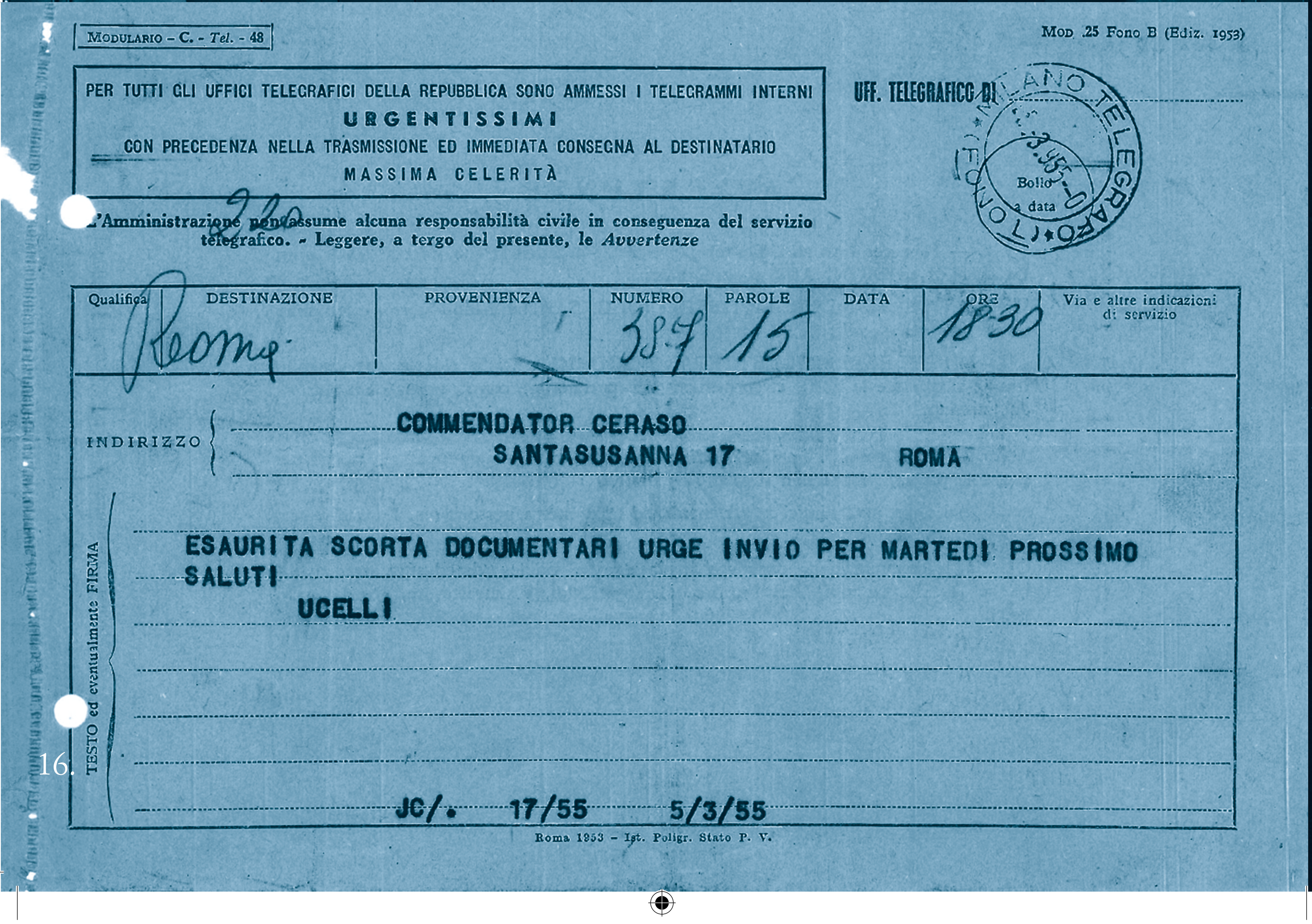
13.

Filmoteca de Catalunya

14.



15.



16.

Modulario – C. - *Tel.* - 48

Mod. 25 Fono B (Ediz. 1953)

PER TUTTI GLI UFFICI TELEGRAFICI DELLA REPUBBLICA SONO AMMESSI I TELEGRAMMI INTERNI
URGENTISSIMI
CON PRECEDENZA NELLA TRASMISSIONE ED IMMEDIATA CONSEGNA AL DESTINATARIO
MASSIMA CELERITÀ

UFF. TELEGRAFICO DI MILANO TELEGRAFO (FONO)

3.55

Bollo a data

220

L'Amministrazione non assume alcuna responsabilità civile in conseguenza del servizio telegrafico. - Leggere, a tergo del presente, le *Avvertenze*

Qualifica	DESTINAZIONE	PROVENIENZA	NUMERO	PAROLE	DATA	ORE	Via e altre indicazioni di servizio
	Roma		387	15		18.30	

INDIRIZZO
COMMENDATOR CERASO
SANTASUSANNA 17 ROMA

TESTO ed eventualmente FIRMA

ESAURITA SCORTA DOCUMENTARI URGE INVIO PER MARTEDI PROSSIMO
SALUTI
UCELLI

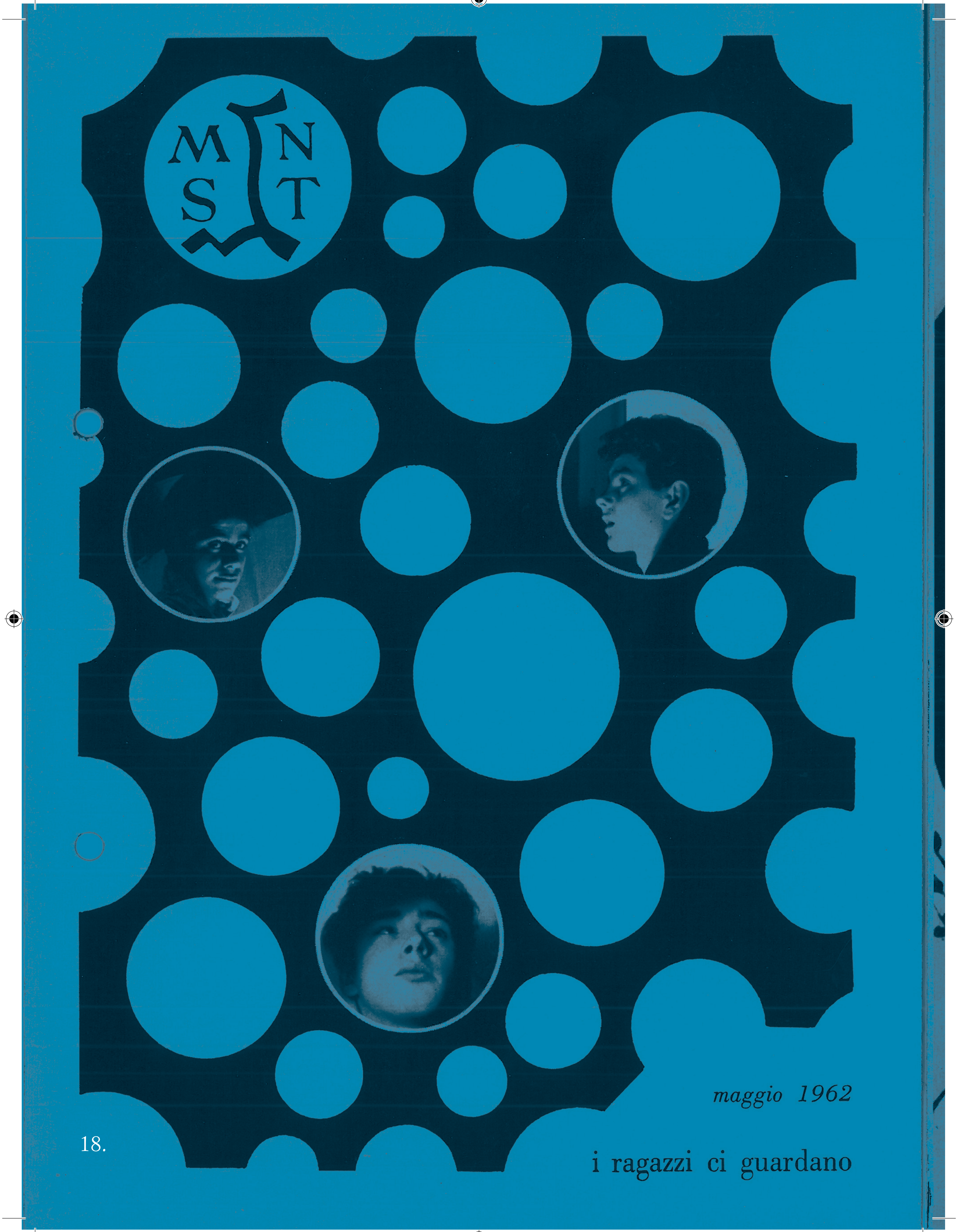
JC/. 17/55 5/3/55

Roma 1953 – Ist. Poligr. Stato P. V.

17.

MARZO 1962

colonna sonora



maggio 1962

i ragazzi ci guardano

18.

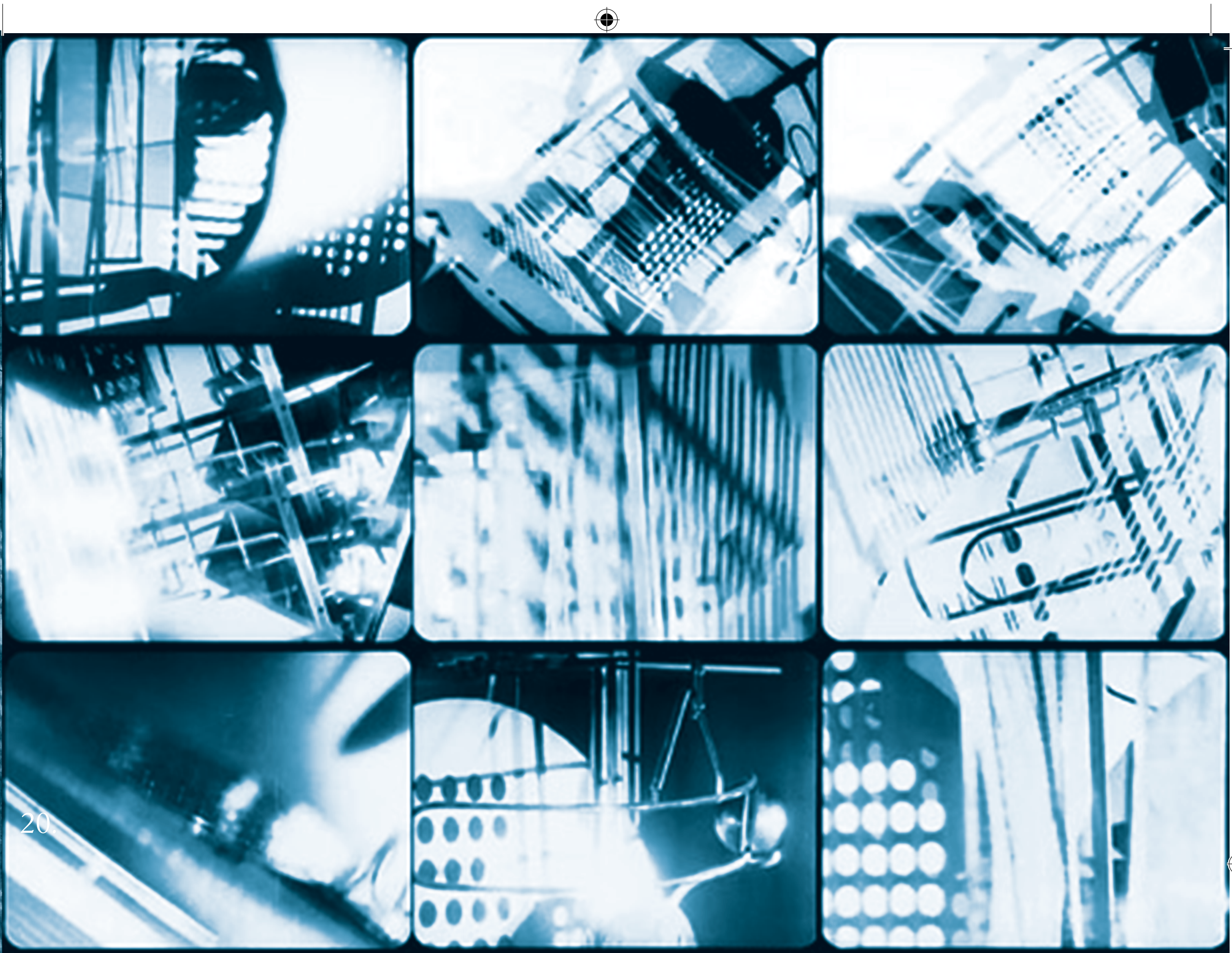
L'UOMO
E
IL MARE

giugno 1962

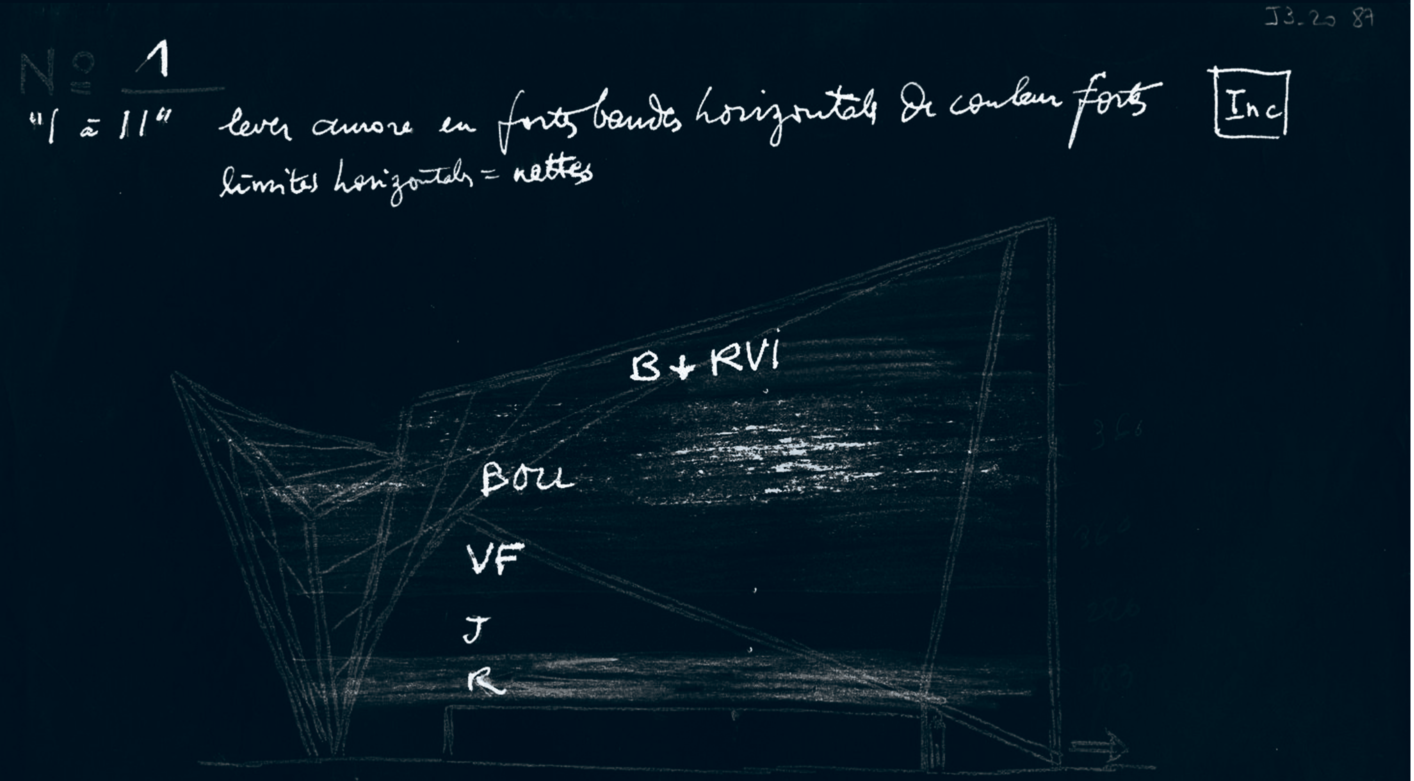
M.I.F.S.

2ª Mostra Internazionale del film scientifico

Città di Milano



20



J3.20 87

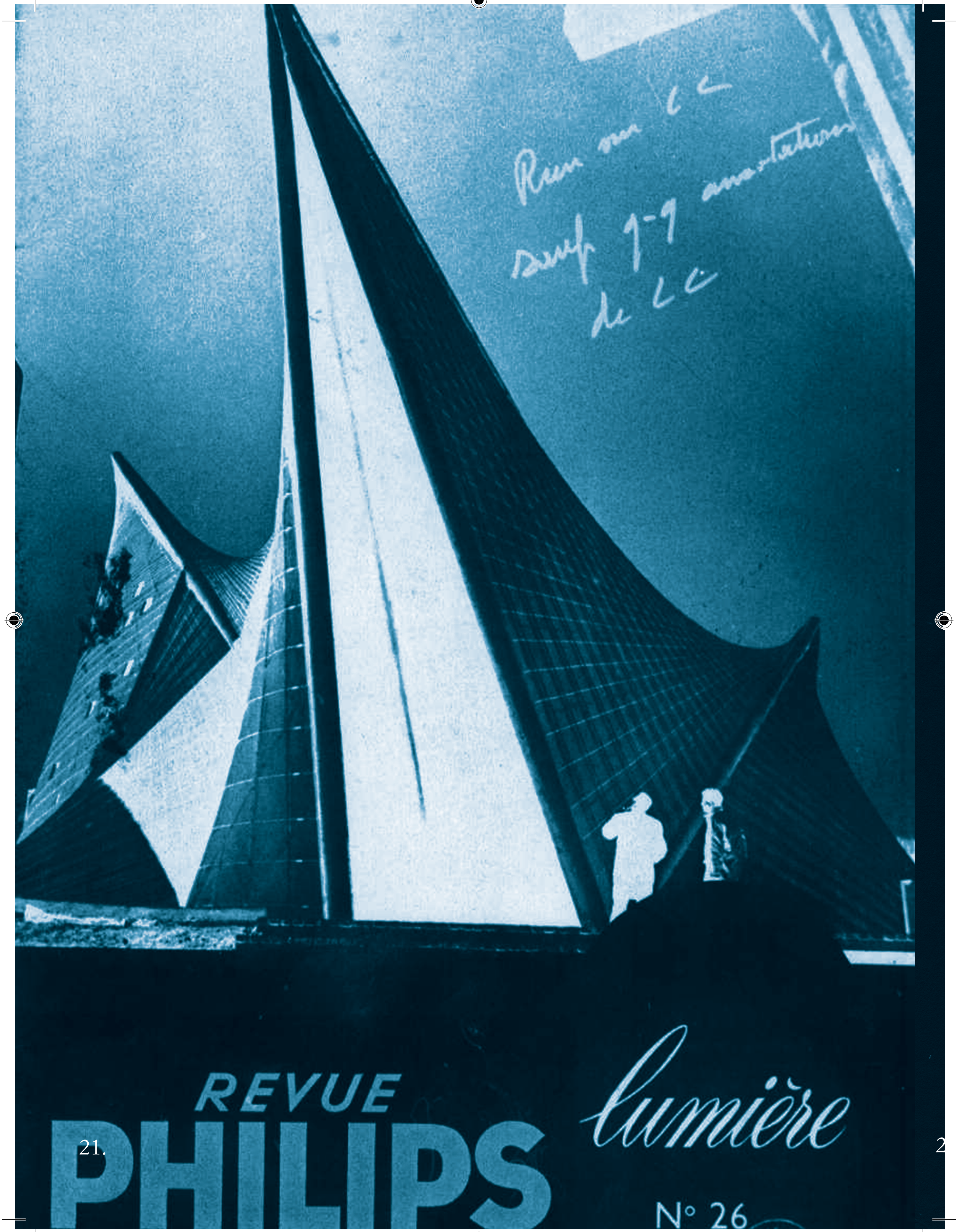
N° 1

"1 à 11" lever aurore en fortes bandes horizontales de couleur forte Inc

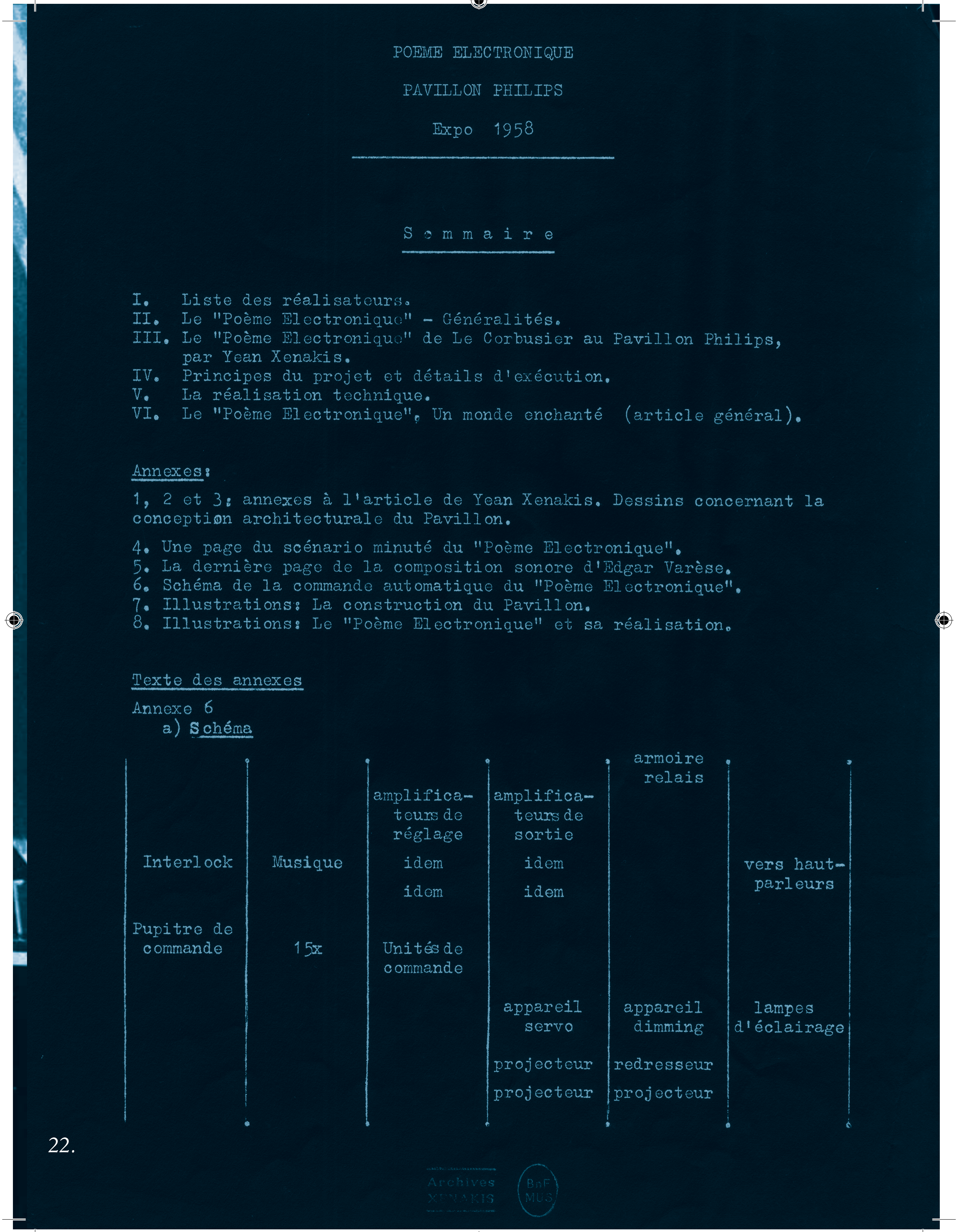
limites horizontales = nettes

B + RVI
BOU
VF
J
R

24.


Rien sur LC
sauf 1-9 annotations
de LC
REVUE
PHILIPS
lumière
N° 26

21.



POEME ELECTRONIQUE

PAVILLON PHILIPS

Expo 1958

Sommaire

I. Liste des réalisateurs.
II. Le "Poème Electronique" - Généralités.
III. Le "Poème Electronique" de Le Corbusier au Pavillon Philips, par Yean Xenakis.
IV. Principes du projet et détails d'exécution.
V. La réalisation technique.
VI. Le "Poème Electronique", Un monde enchanté (article général).

Annexes:

1, 2 et 3: annexes à l'article de Yean Xenakis. Dessins concernant la conception architecturale du Pavillon.

4. Une page du scénario minuté du "Poème Electronique".
5. La dernière page de la composition sonore d'Edgar Varèse.
6. Schéma de la commande automatique du "Poème Electronique".
7. Illustrations: La construction du Pavillon.
8. Illustrations: Le "Poème Electronique" et sa réalisation.

Texte des annexes

Annexe 6
a) Schéma

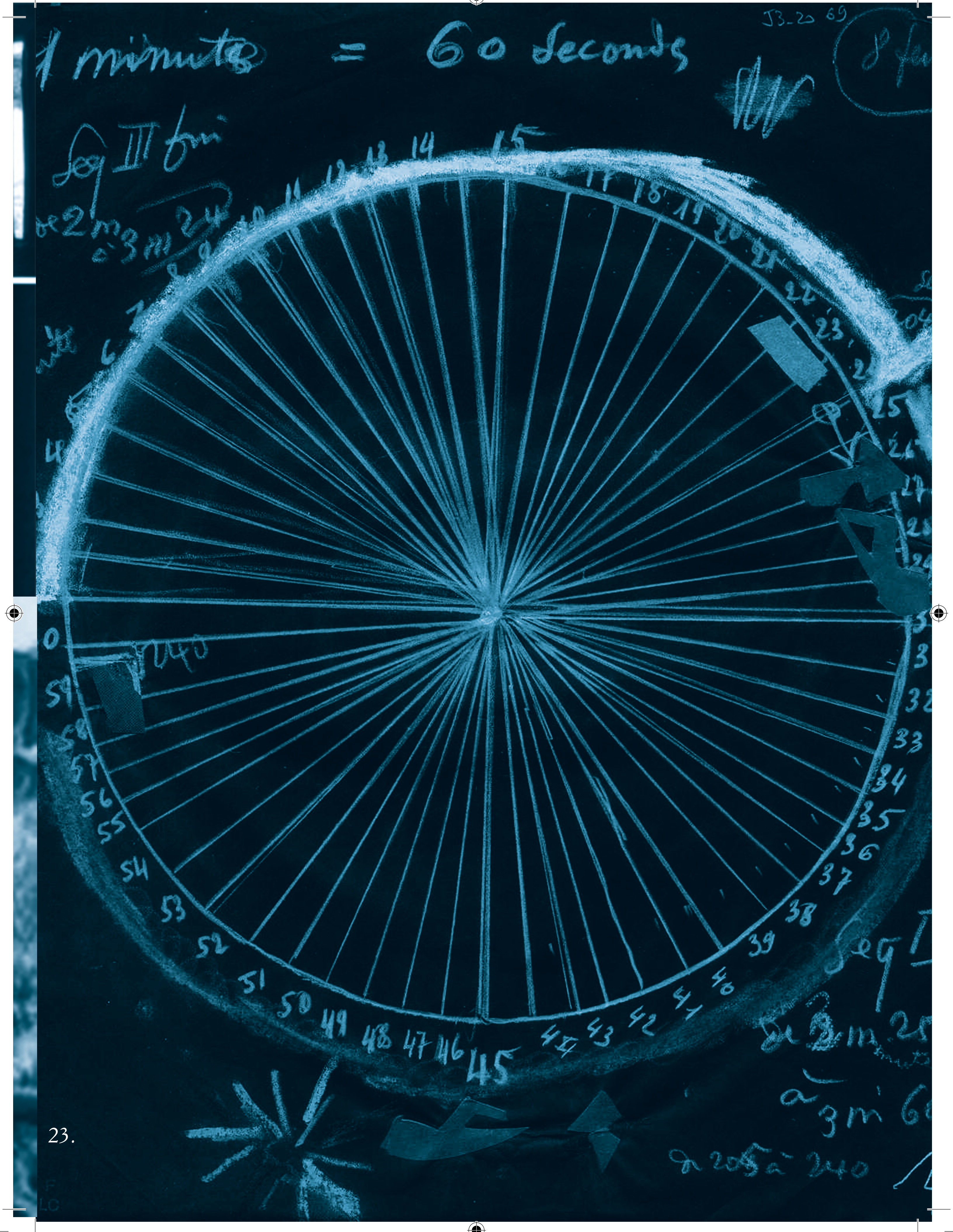
		amplificateurs de réglage	amplificateurs de sortie	armoire relais	
Interlock	Musique	idem	idem		vers haut-parleurs
		idem	idem		
Pupitre de commande	15x	Unités de commande			
			appareil servo	appareil dimming	lampes d'éclairage
			projecteur	redresseur	
			projecteur	projecteur	

22.

Archives XENAKIS
BnF MUS

25.

26.


1 minute = 60 seconds
J3-20 69
Seq III fin
de 2m 24
à 3m
45
0
59
58
57
56
55
54
53
52
51
50
49
48
47
46
44
43
42
41
40
39
38
37
36
35
34
33
32
31
25
24
23
22
21
20
19
18
17
15
14
13
12
11
10
9
8
7
6
5
4
Seq
de 2m 25
à 3m
de 205 à 240

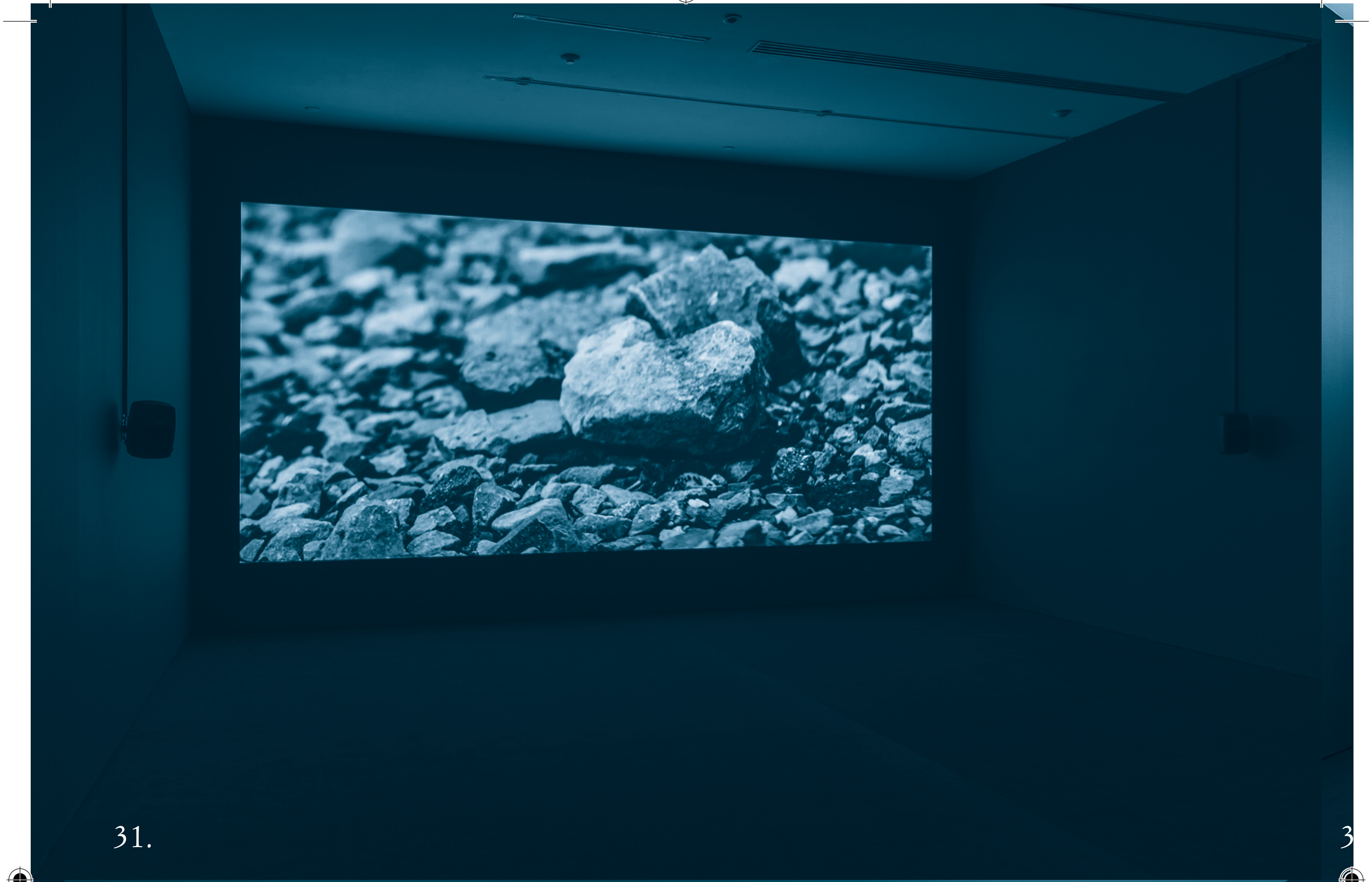
23.

27.

28.

29.

30.

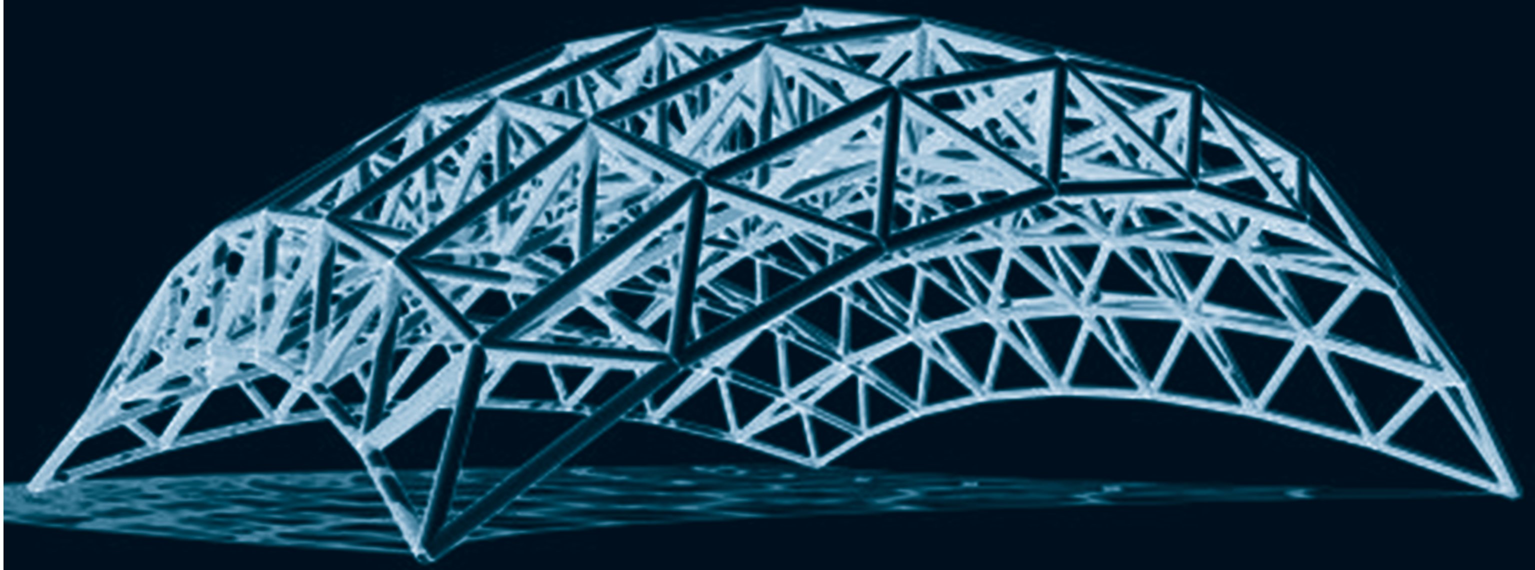


31.

32.

33.

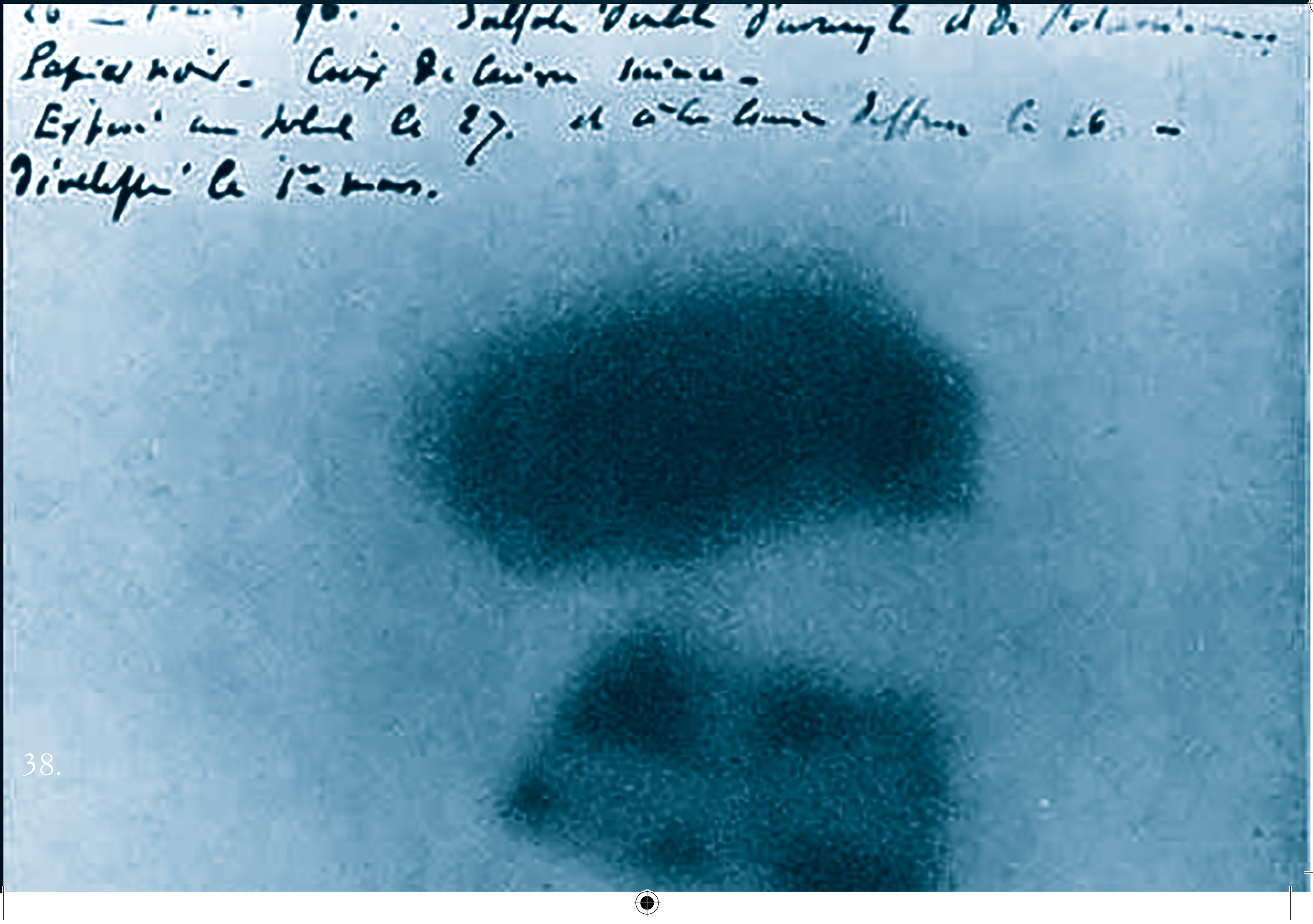
34.



35.

36.

37.



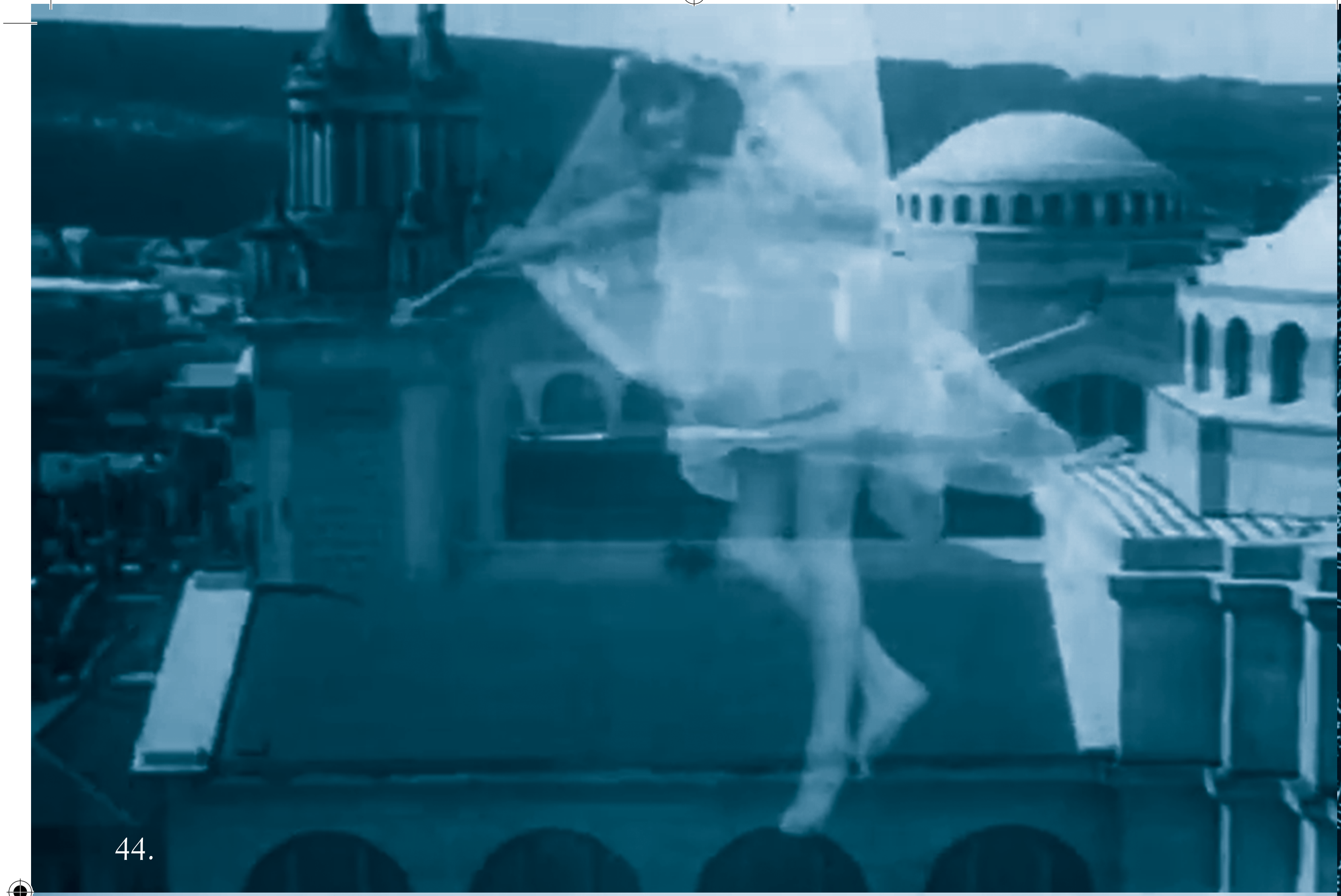
26 – Février 96. Sulfate double d'uranyle et de potassium.
Papier noir. Croix de cuivre mince.
Exposé au soleil le 27 et à la lumière diffuse le 26. –
Développé le 1er mars.

38.

39.

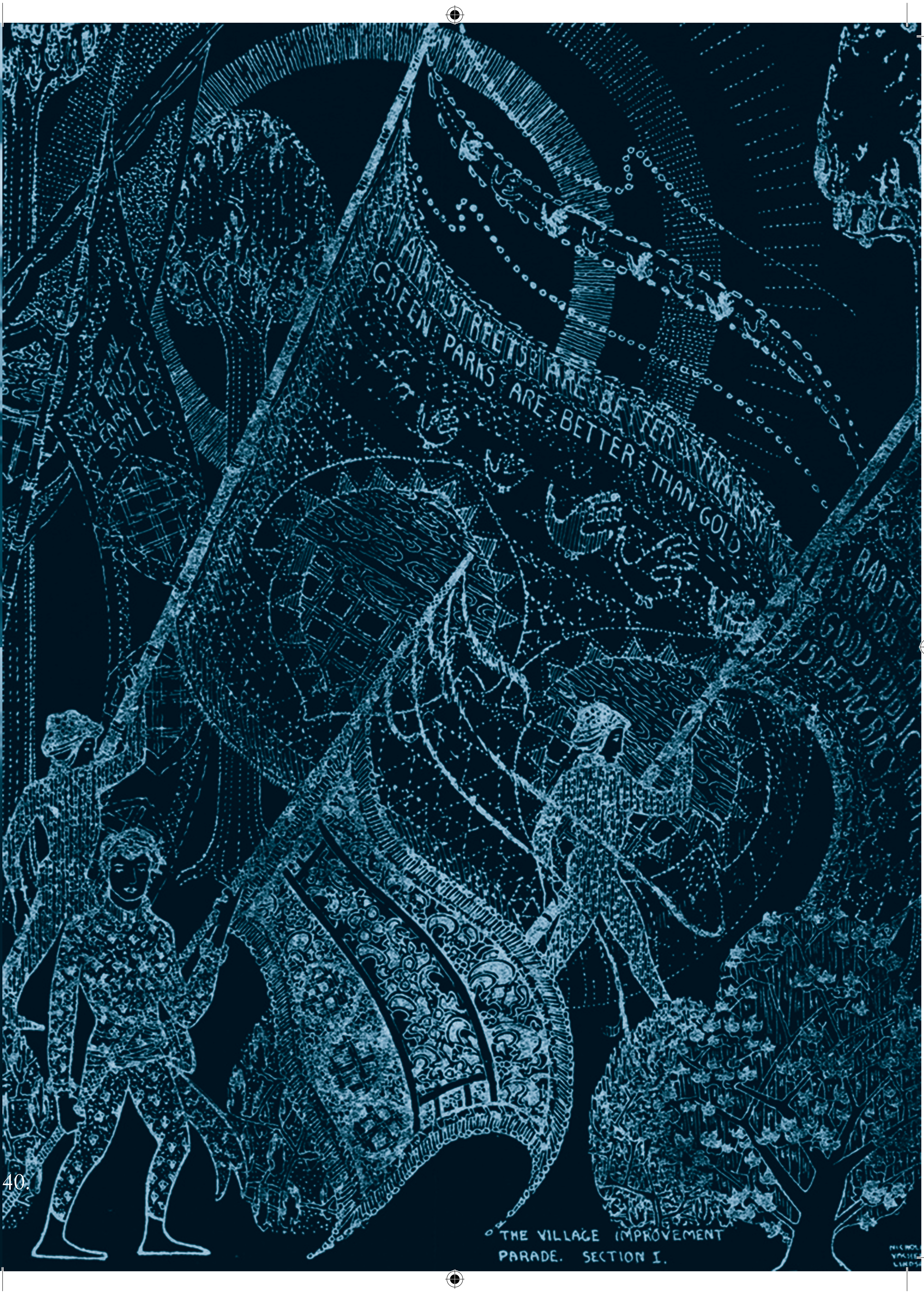
332min
HDV1080i
25P
0:53:20:18
70
1.1m
F4.8
25
4200K

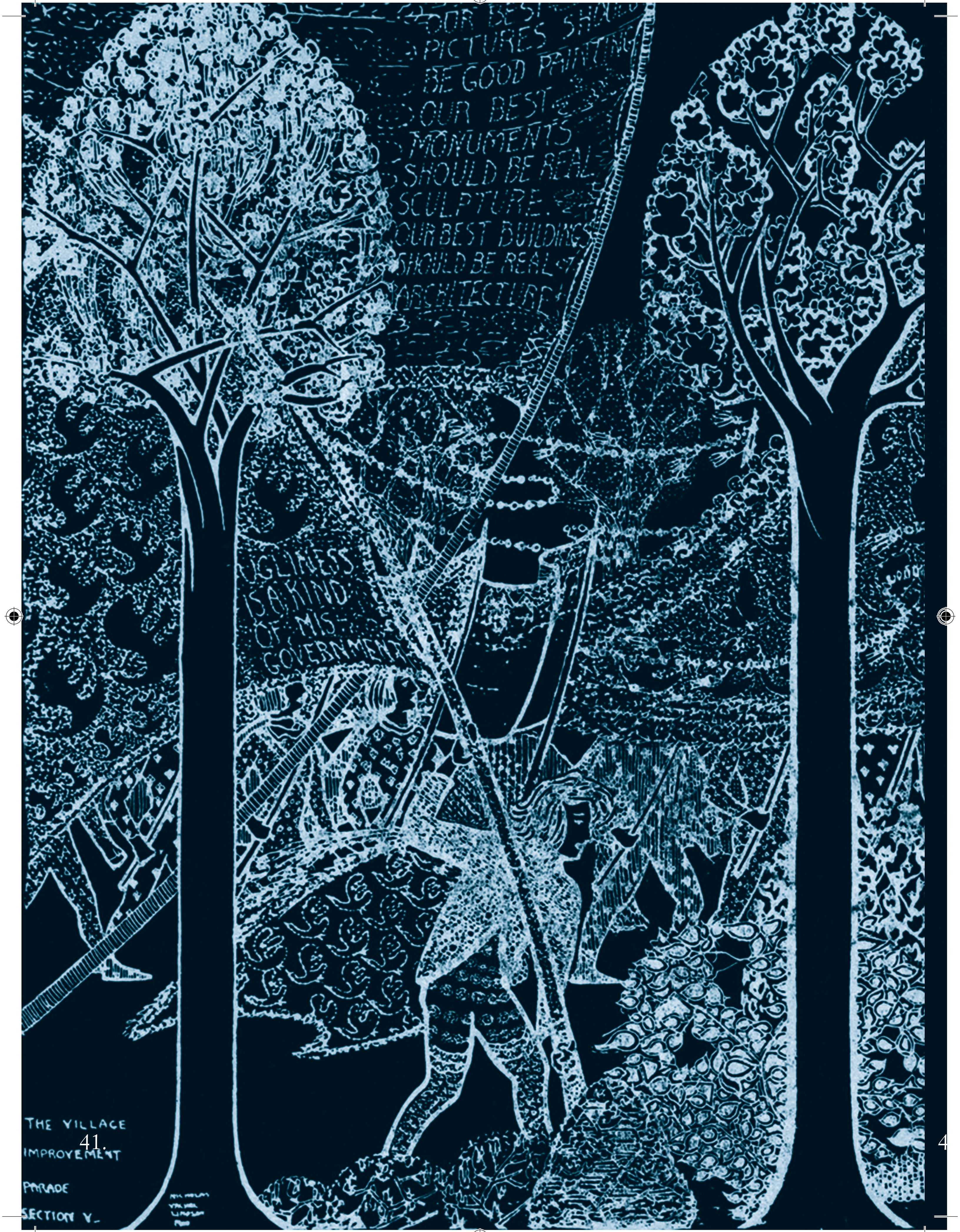
43.



44.

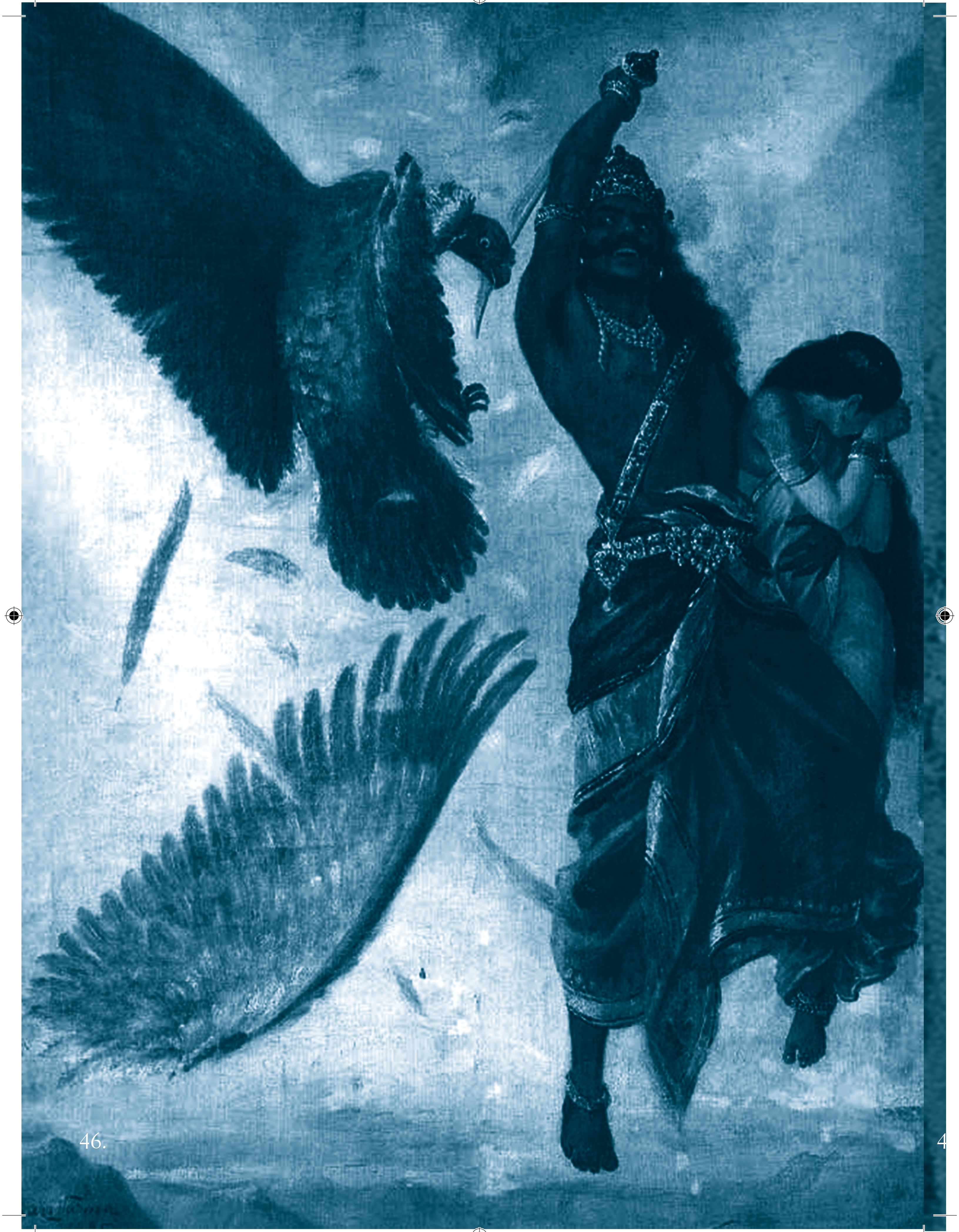
45.

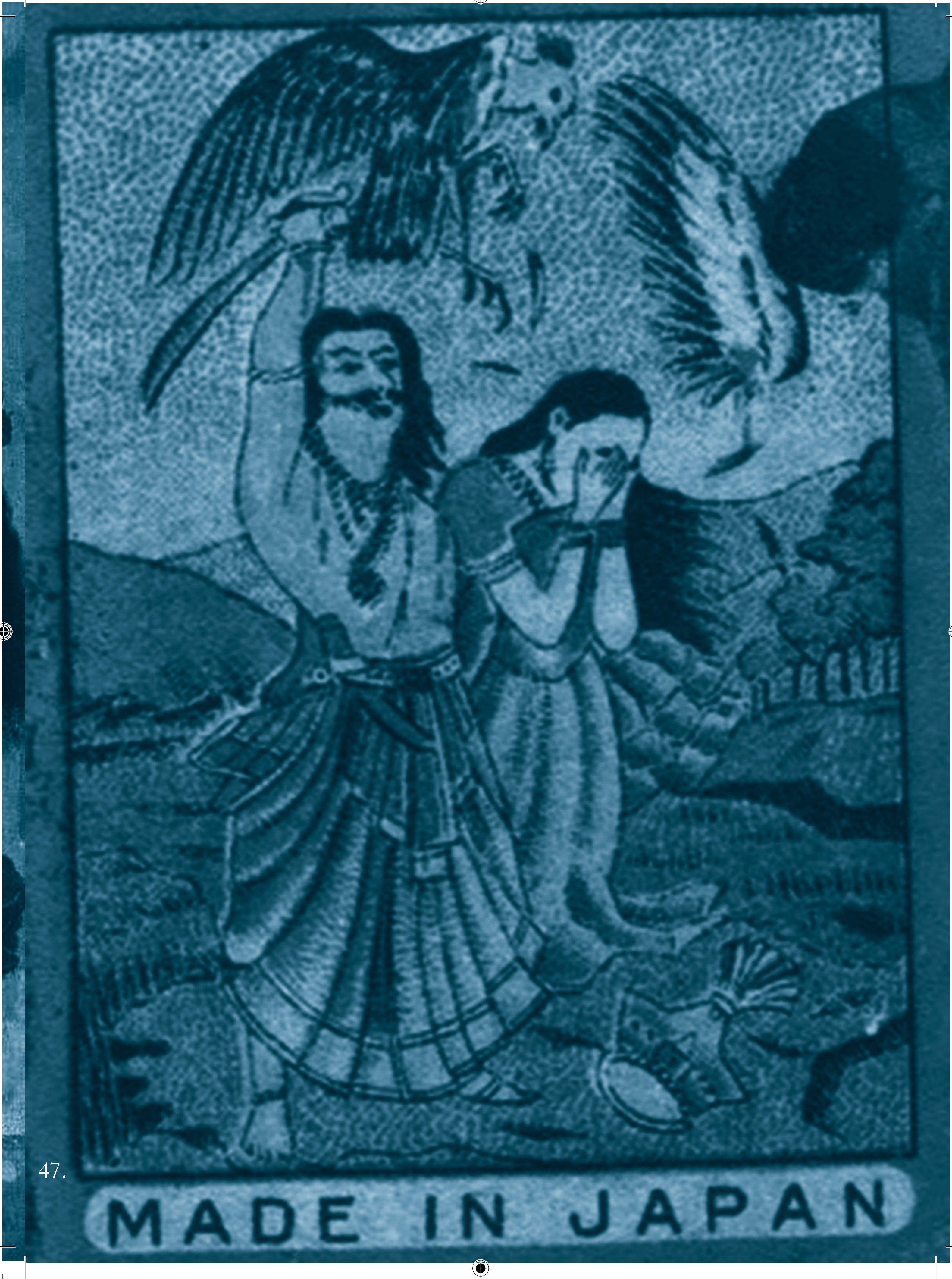

WE MUST LEARN TO SMILE
FAIR STREETS ARE BETTER THAN
GREEN PARKS ARE BETTER THAN GOLD
BAD PU
GOOD PUBLIC
DEMOCRAC
THE VILLAGE IMPROVEMENT PARADE. SECTION I.
NICHOL
VACHEL
LINDSA


OUR BEST SHA
PICTURES SHA
BE GOOD PAINTIN
OUR BEST
MONUMENTS
SHOULD BE REAL
SCULPTURE.
OUR BEST BUILDINGS
SHOULD BE REAL
ARCHITECTURE
UGLINESS
IS A KIND
OF MIS-
GOVERNMENT
THE VILLAGE
IMPROVEMENT
PARADE
SECTION V.

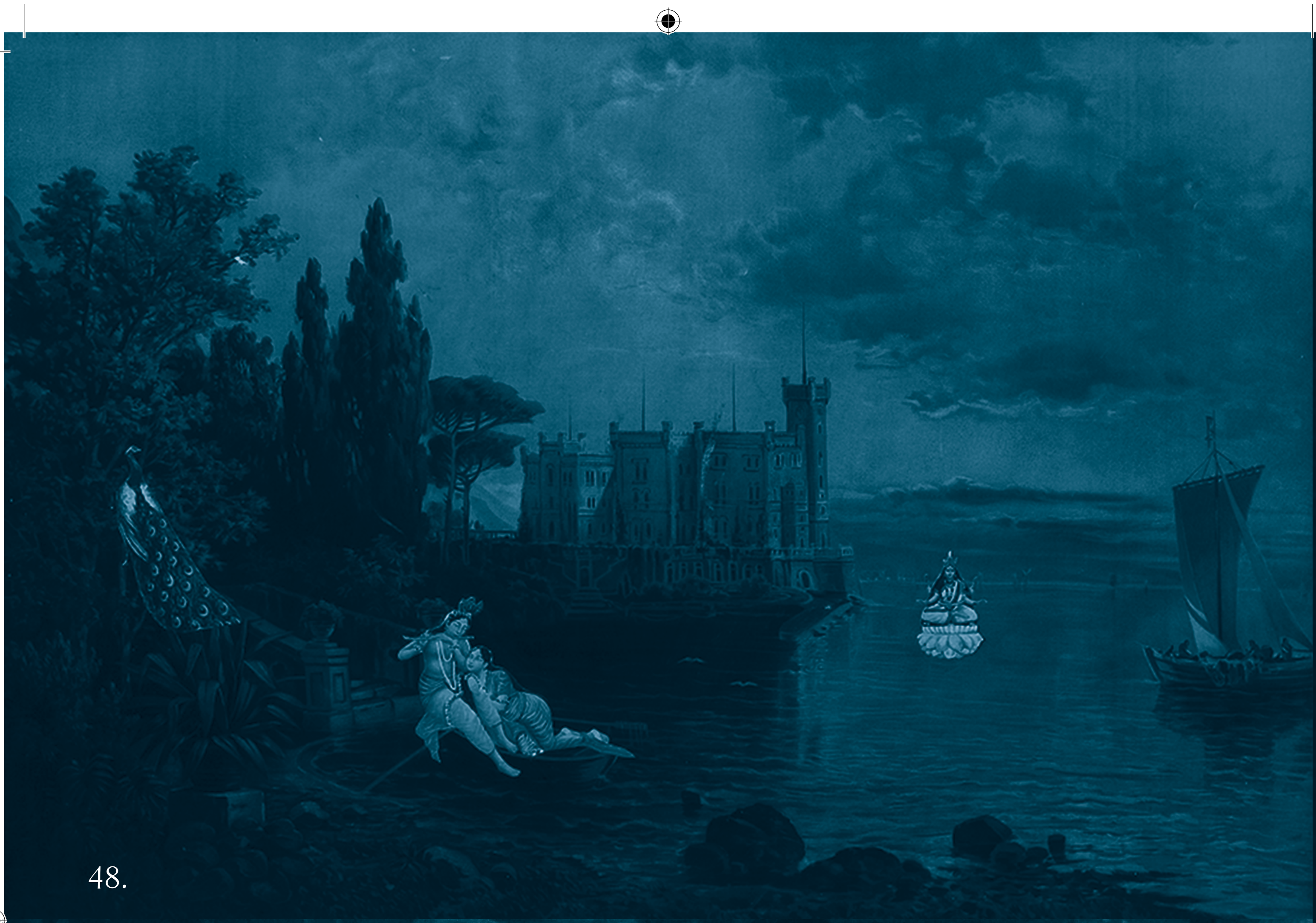
41.

NICHOLAS VACHEL LINDSAY

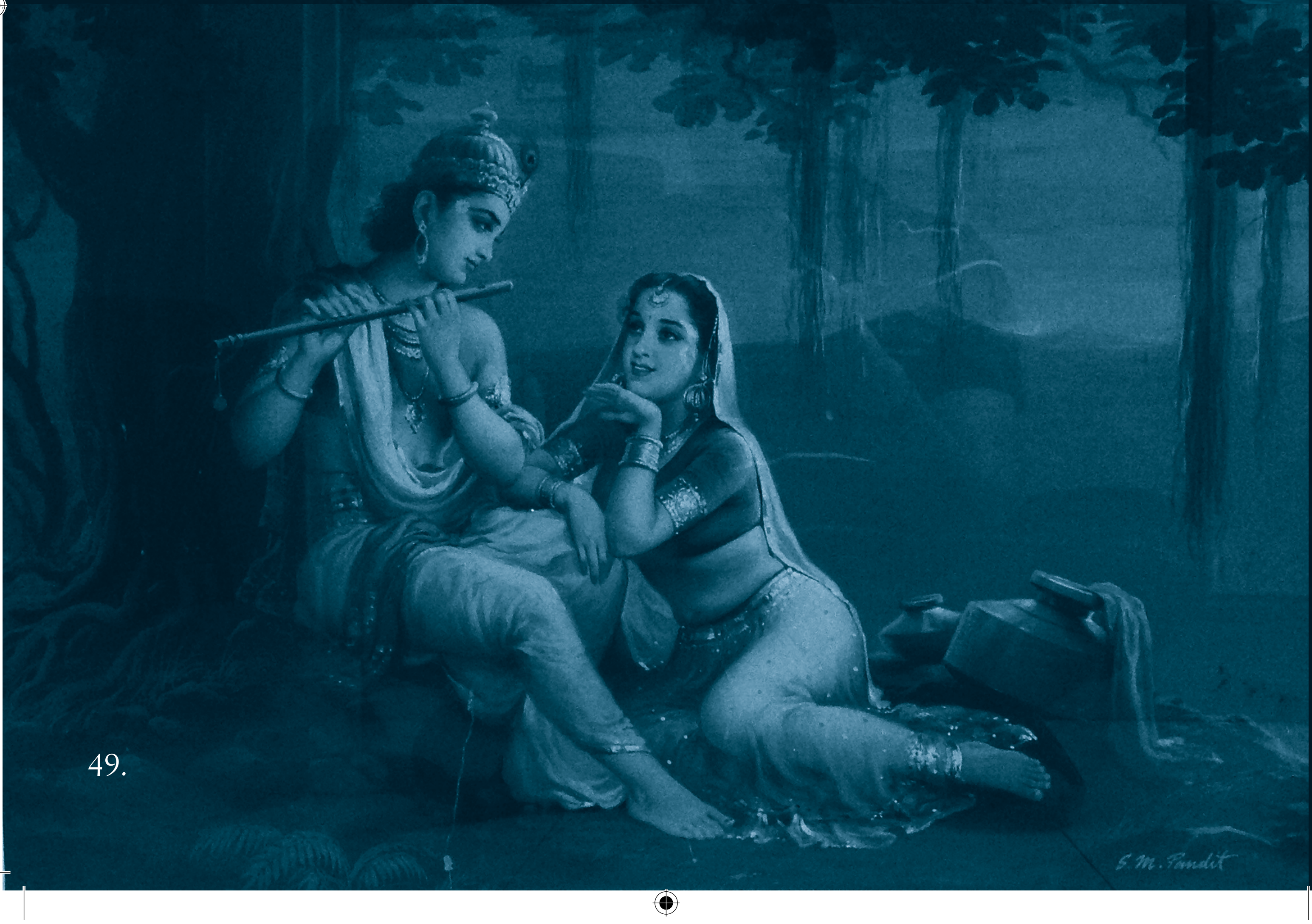



MADE IN JAPAN

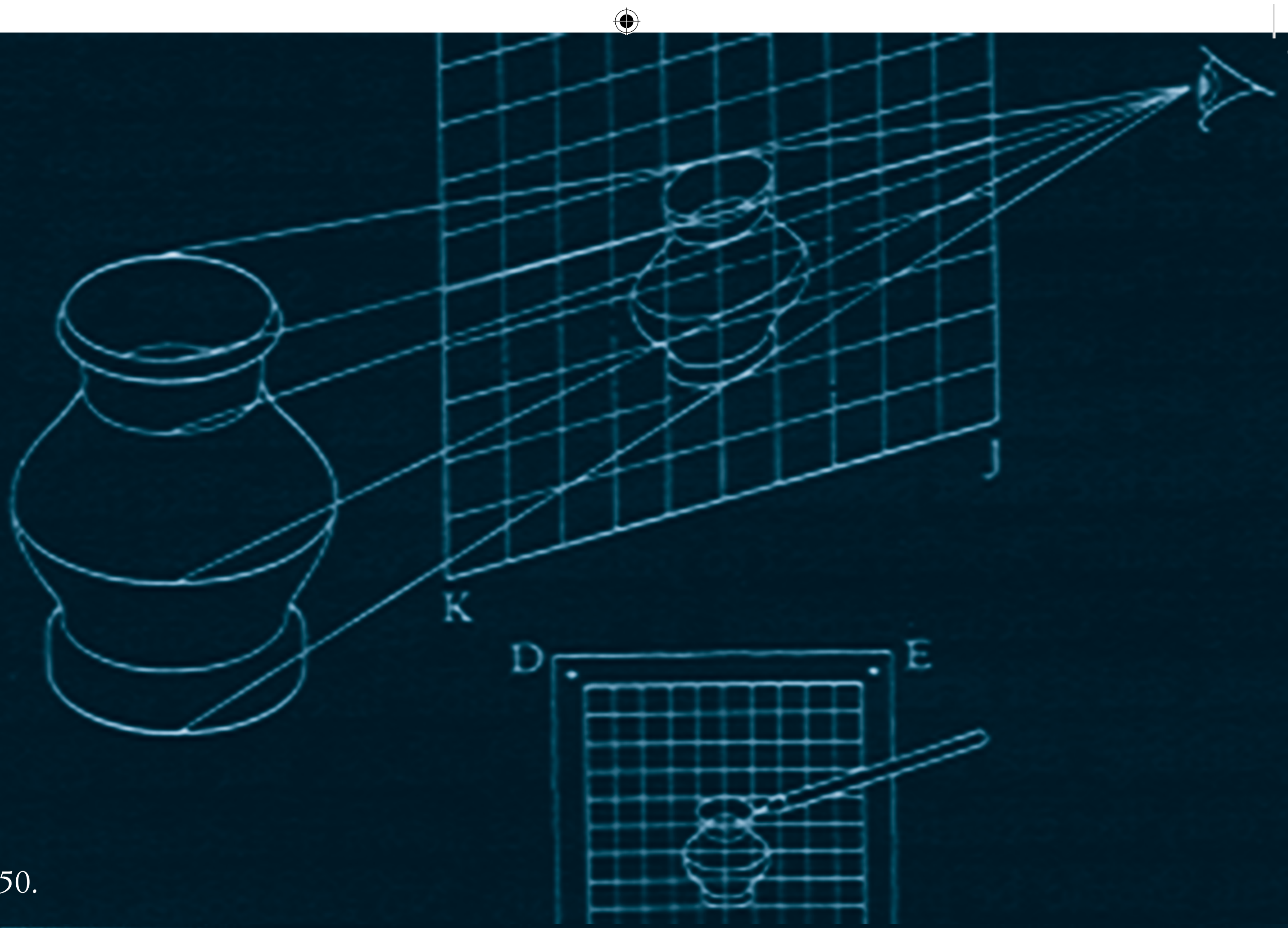
47.



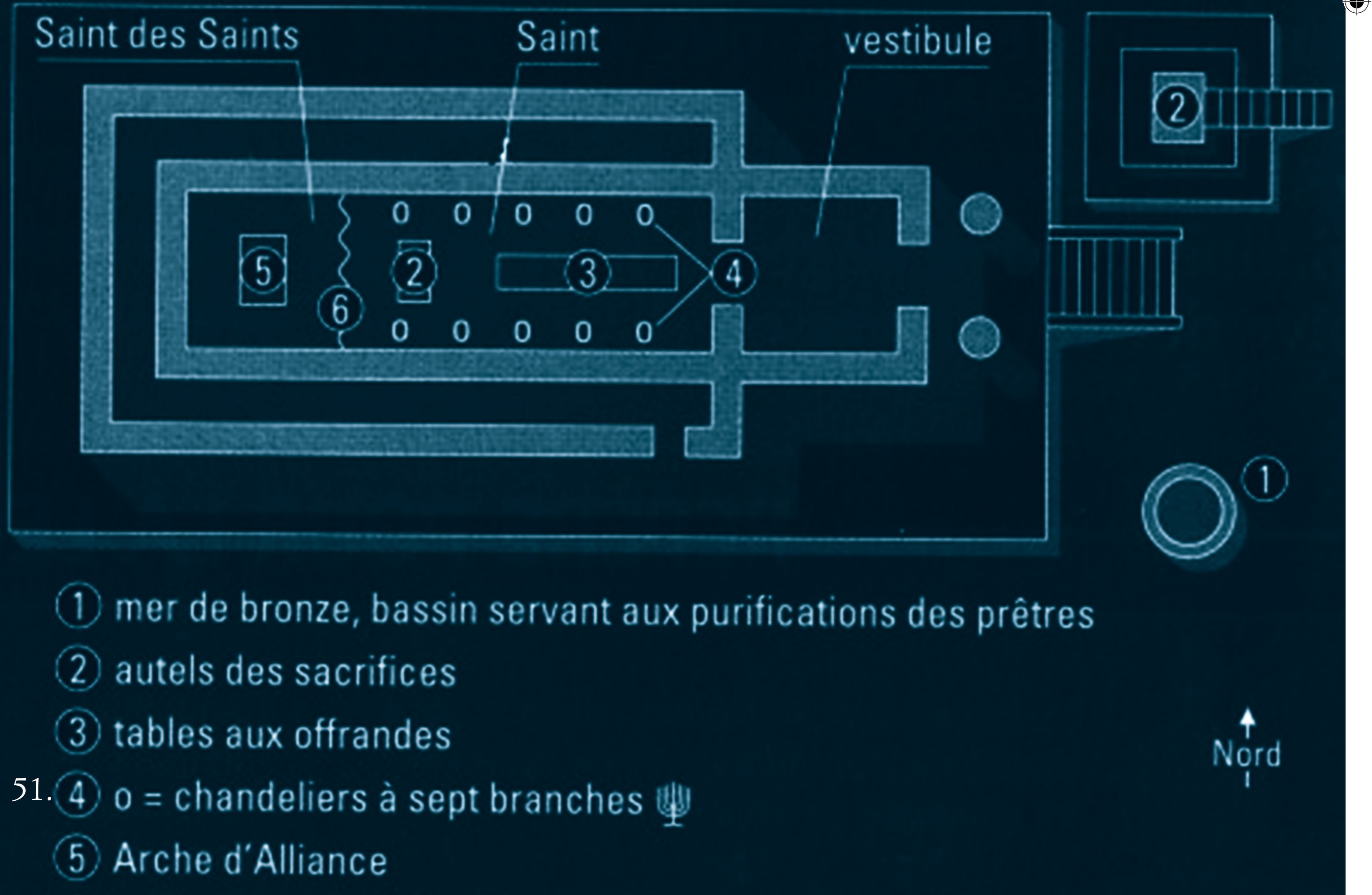
48.



49.

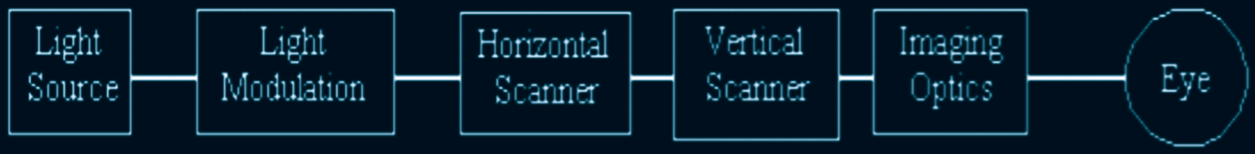

J
K
D
E

50.

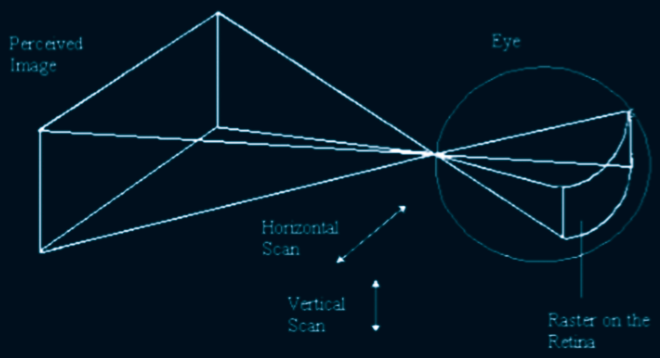

Saint des Saints
Saint
vestibule
①
②
③
④
⑤
⑥
① mer de bronze, bassin servant aux purifications des prêtres
② autels des sacrifices
③ tables aux offrandes
④ o = chandeliers à sept branches
⑤ Arche d'Alliance
Nord

51.

52.

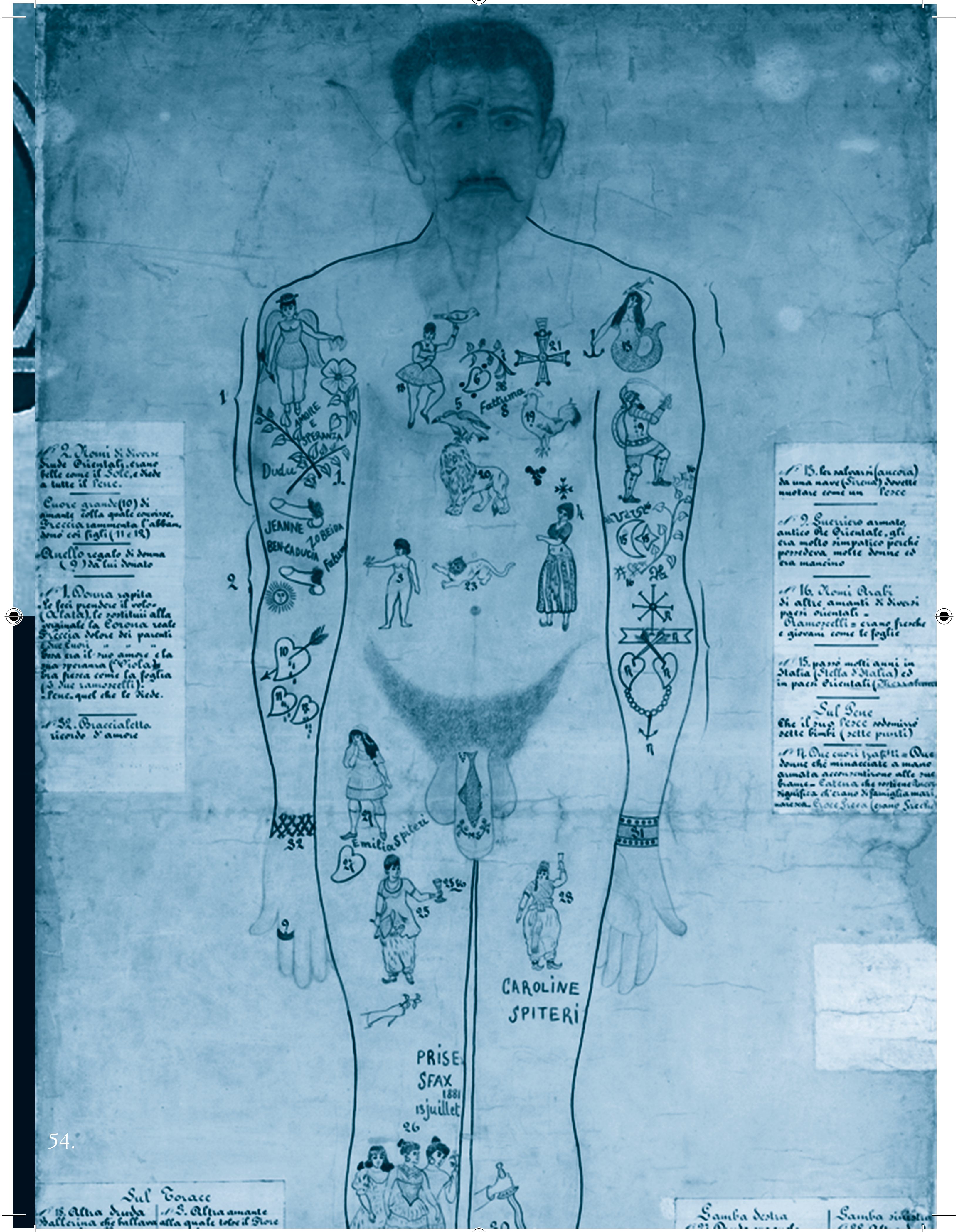

Light Source
Light Modulation
Horizontal Scanner
Vertical Scanner
Imaging Optics
Eye

Above figure is the basic block diagram of VRD


Perceived Image
Eye
Horizontal Scan
Vertical Scan
Raster on the Retina

53.

As shown, the viewer perceives a wide field of view image as if from a screen placed some distance away.



N° 2. Nomi di diverse
Drude Orientali, erano
belle come il Sole, e diede
a tutte il Pene.

Cuore grande (10) di
amante colla quale convisse.
Freccia rammenta l'abban-
dono coi figli (11 e 12)

Anello regalo di donna
(9) da lui donato

N° 1. Donna rapita
Le feci prendere il volo
(Alata), le restituii alla
originale la Corona reale
Freccia dolore dei parenti
Due Cuori " " "
Bona era il suo amore e la
sua speranza (Viola)
Era fresca come la foglia
(I due ramoscelli).
Pene, quel che le diede.

N° 32. Braccialetto
ricordo d'amore

N° 13. Fu salvato (ancora)
da una nave (Sirena) dovette
nuotare come un Pesce

N° 9. Guerriero armato,
antico Re Orientale, gli
era molto simpatico perché
possedeva molte donne ed
era mancino

N° 16. Nomi Arabi
di altre amanti di diversi
paesi orientali –
Ramoscelli = erano fresche
e giovani come le foglie

N° 15. passò molti anni in
Italia (Stella d'Italia) ed
in paesi Orientali (Messalon

Sul Pene
Che il suo Pesce sedeminò
sette bimbi (sette punti)

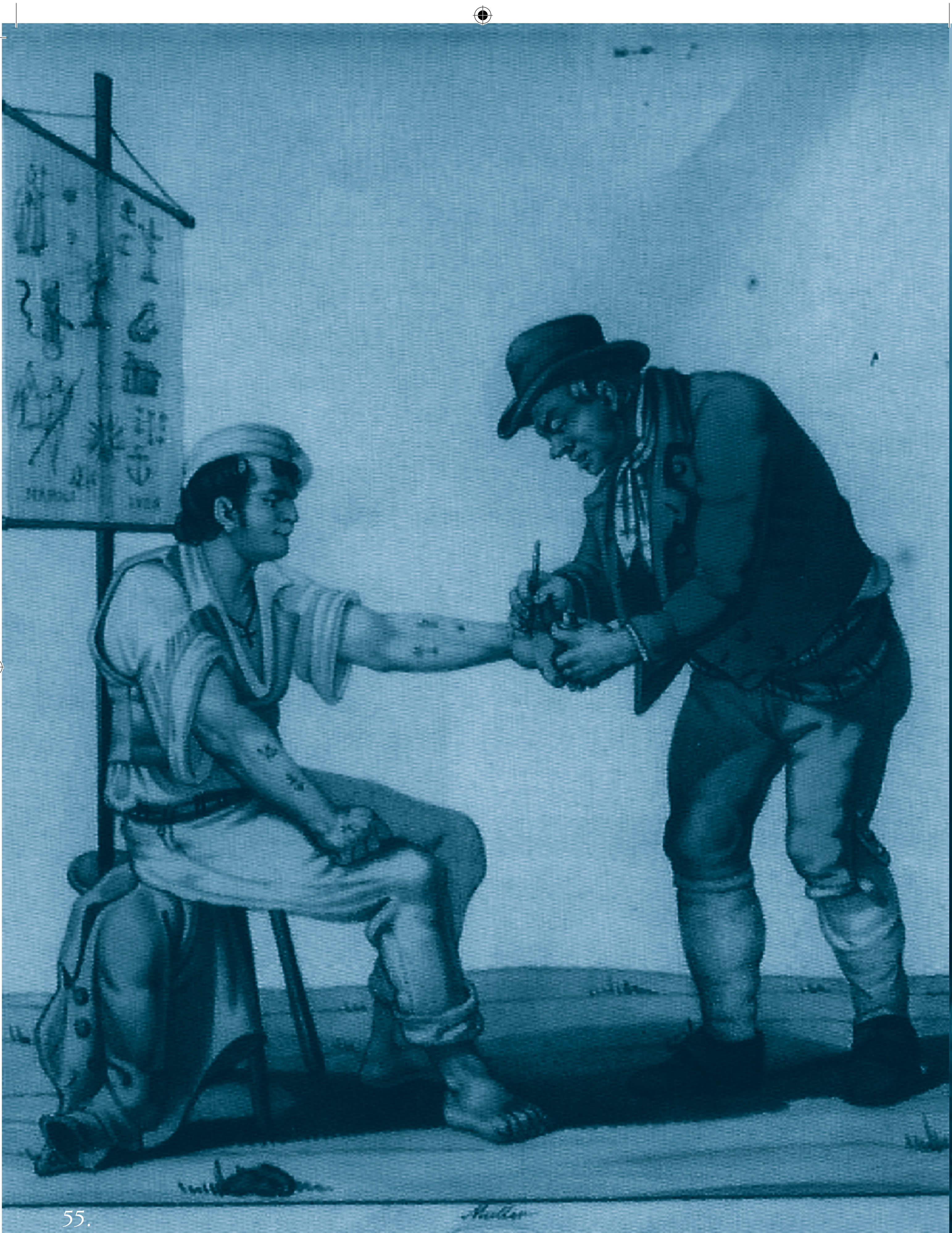
N° 17. Due cuori trafitti = Due
donne che minacciate a mano
armata acconsentirono alle sue
brame – Catena che sostiene l'anco
significa ch'erano di famiglia mari
naresca. Croce Greca (erano Greche)

Sul Torace
N° 18. Altra druda
ballerina che ballava

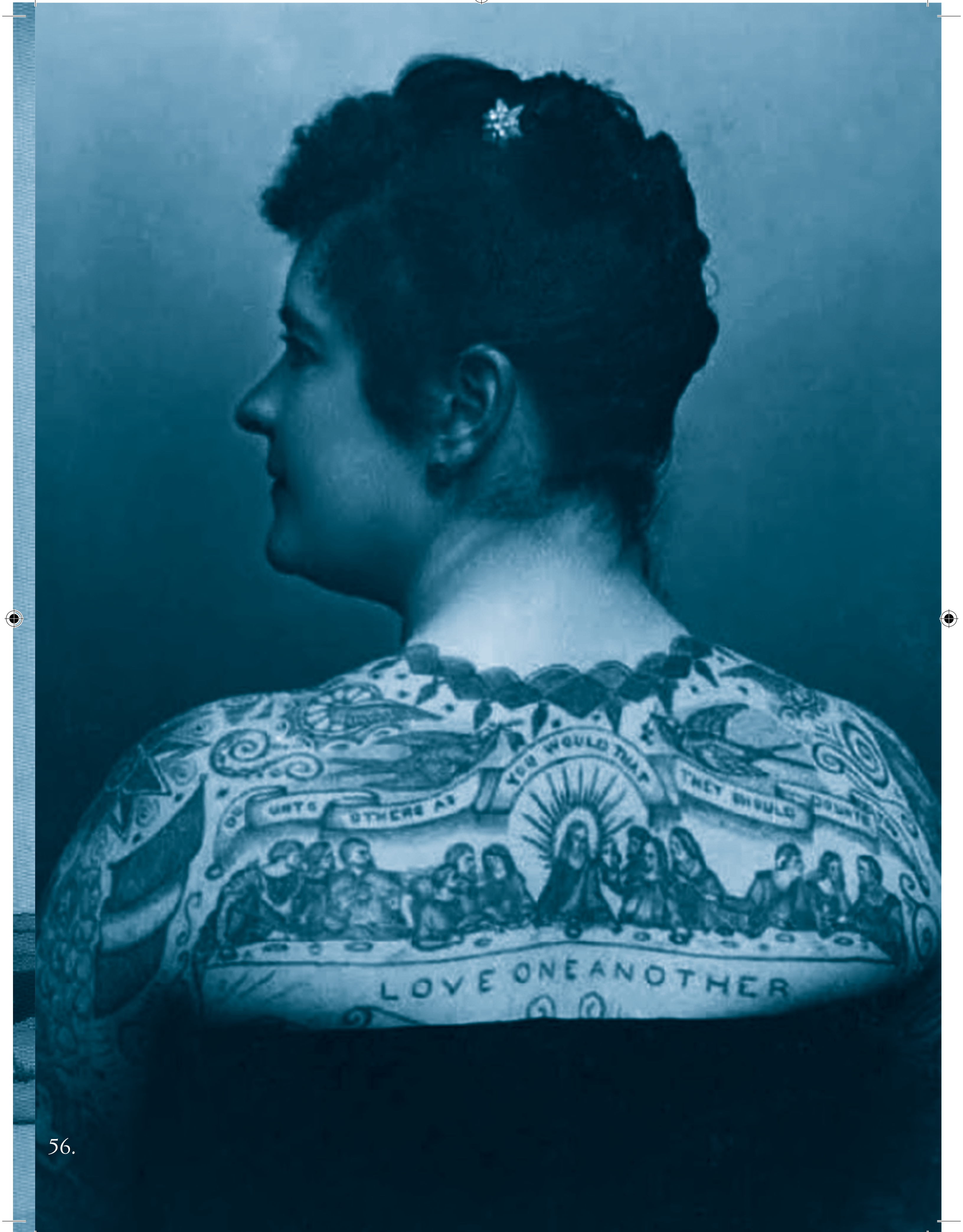
N° 5. Altra amante
alla quale tolse il Fiore

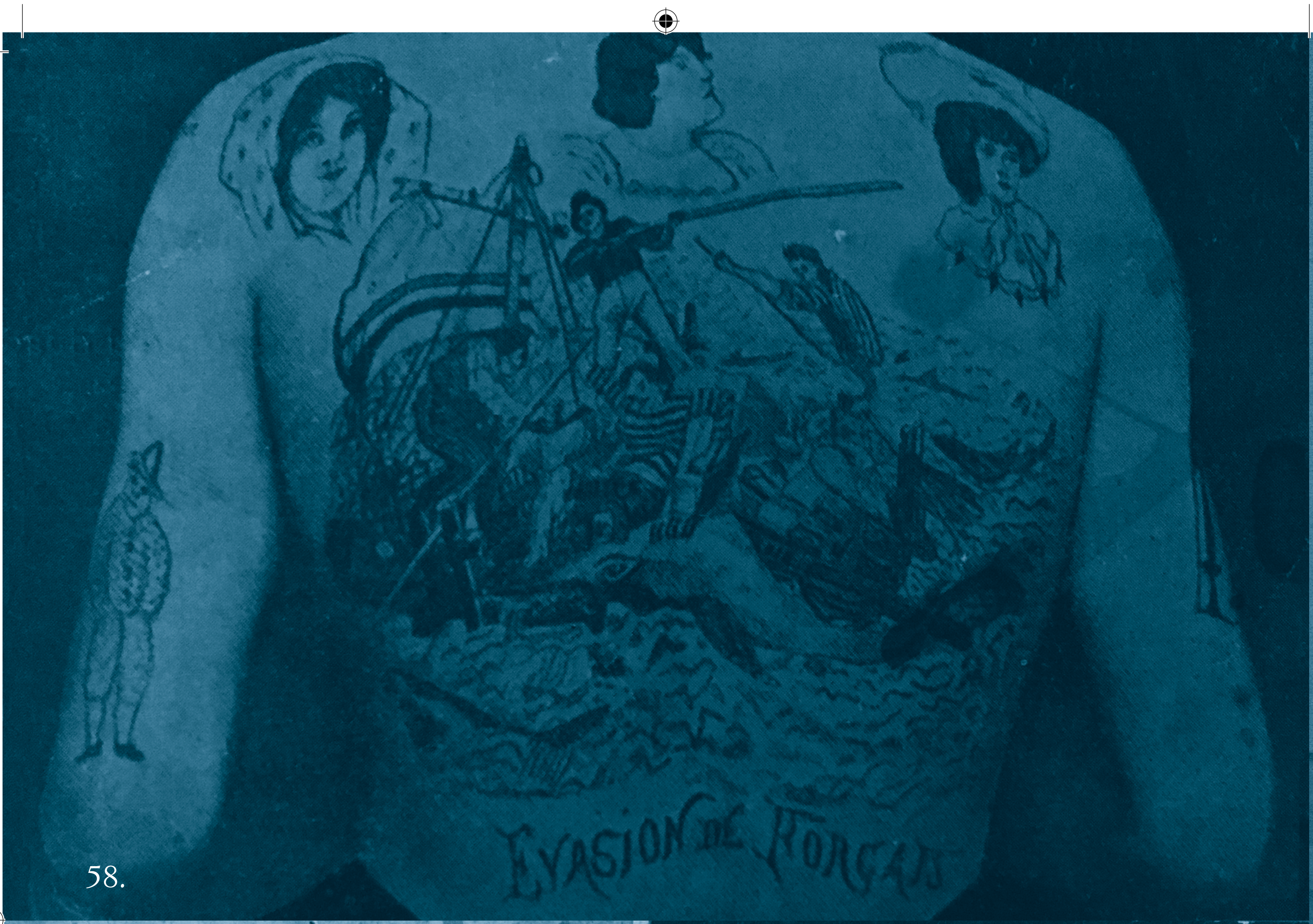
Gamba destra

Gamba sinistra

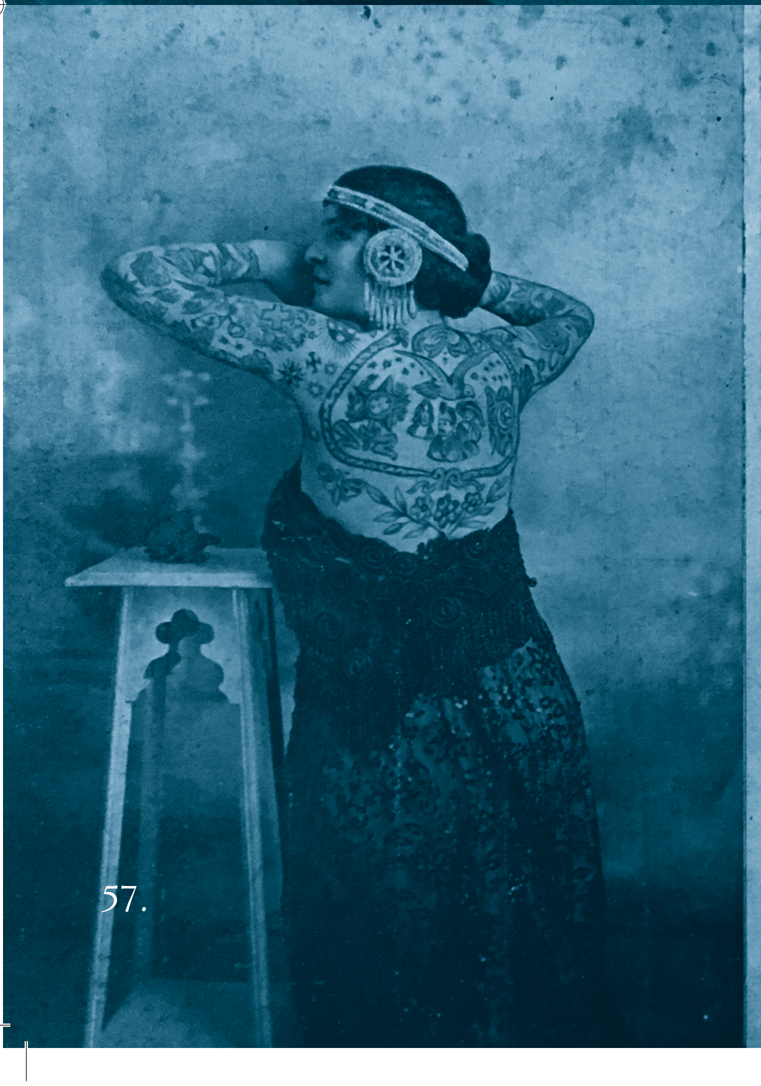


Il Marcatore di Santilli

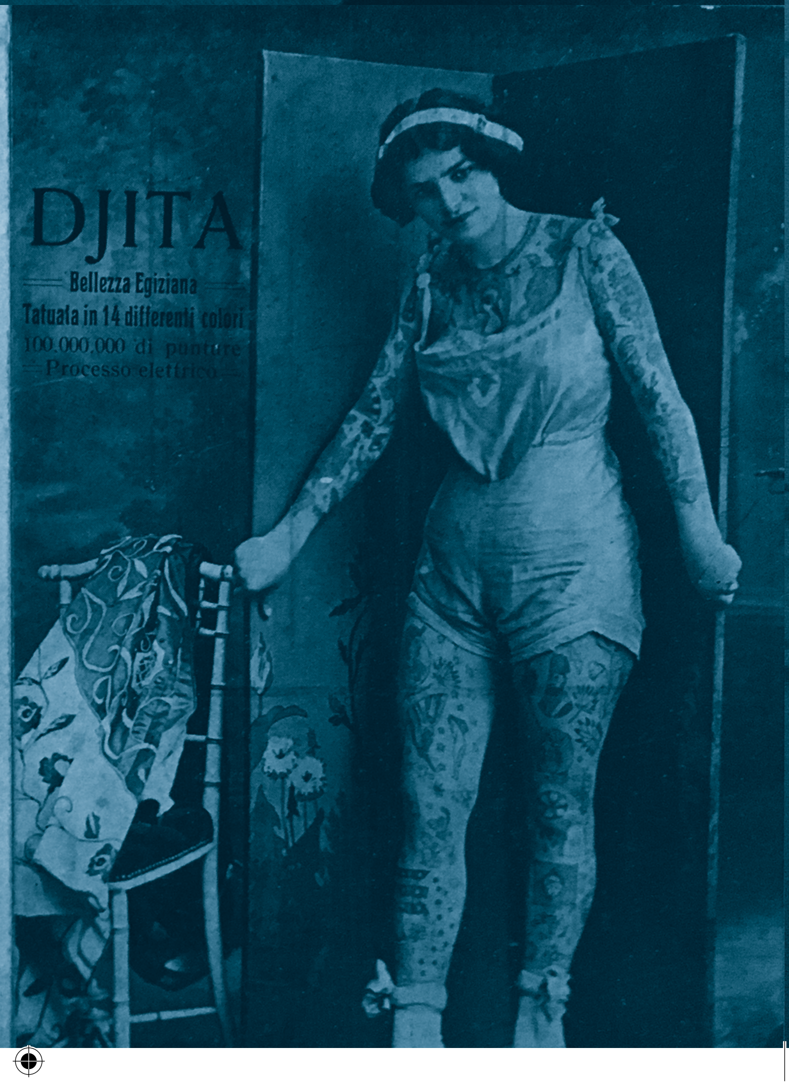

UNTO OTHERS AS YOU WOULD THAT THEY SHOULD DO UNTO
LOVE ONE ANOTHER

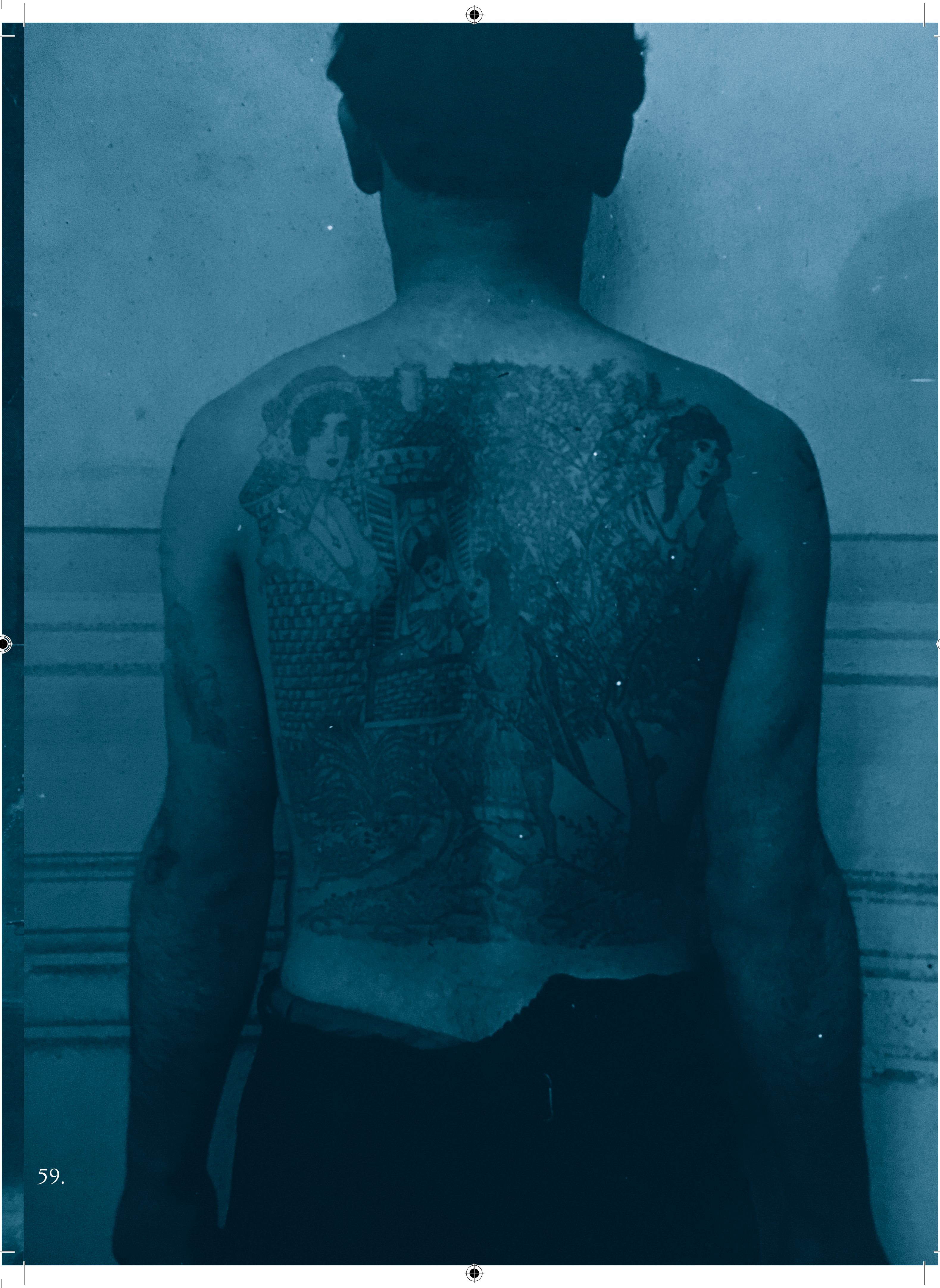

EVASION DE FORÇATS

58.



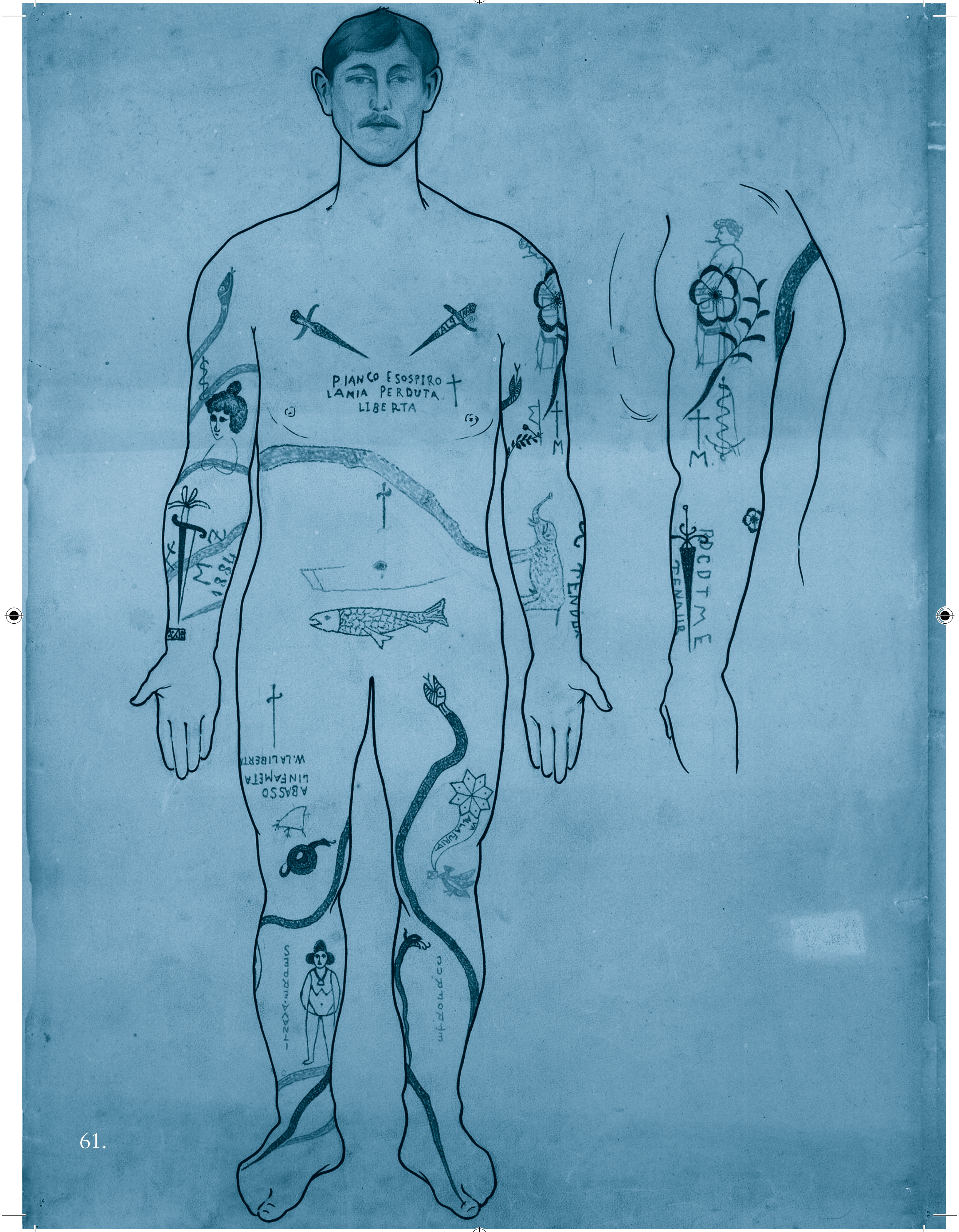
57.


DJITA
Bellezza Egiziana
Tatuata in 14 differenti colori
100.000.000 di punture
Processo elettrico

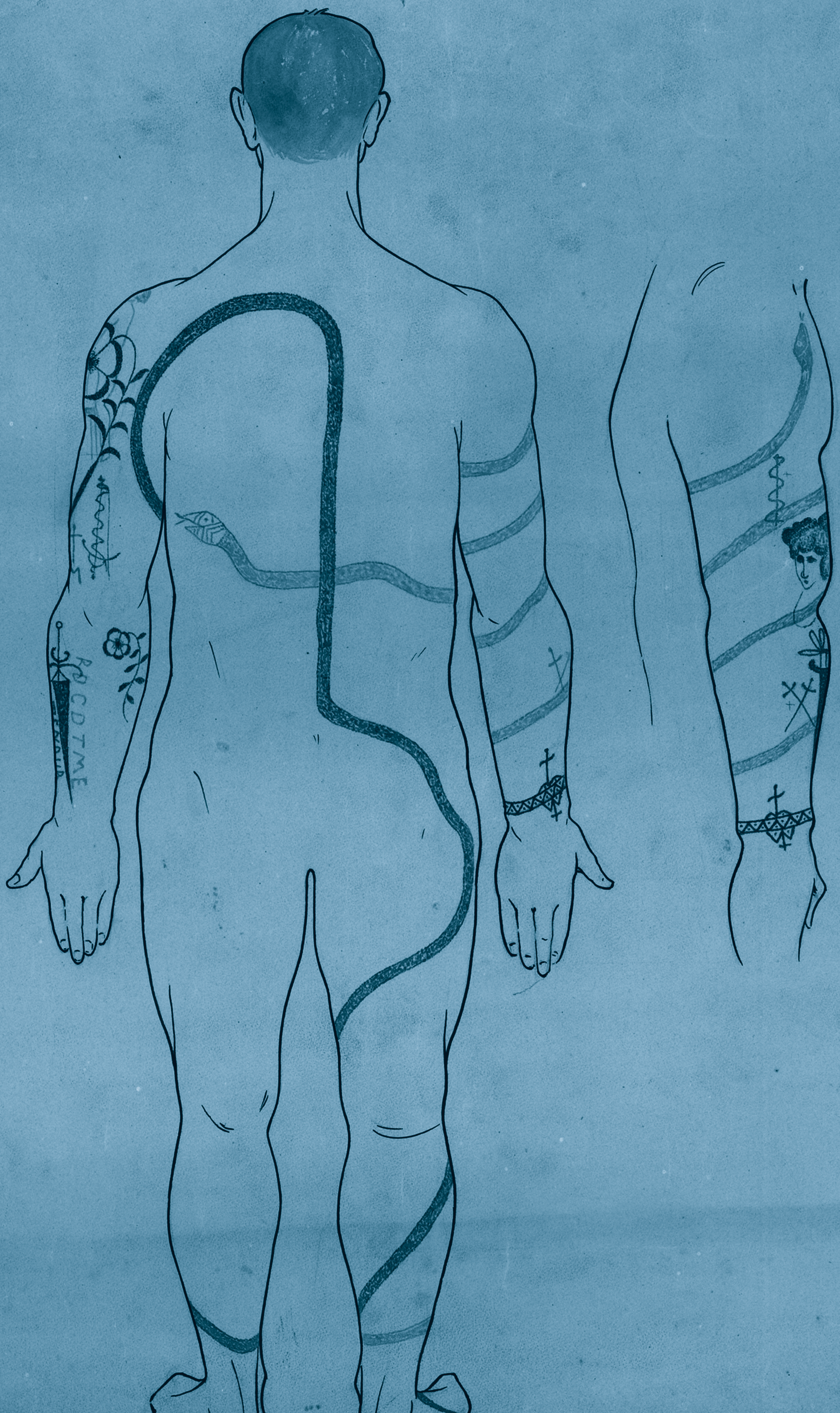


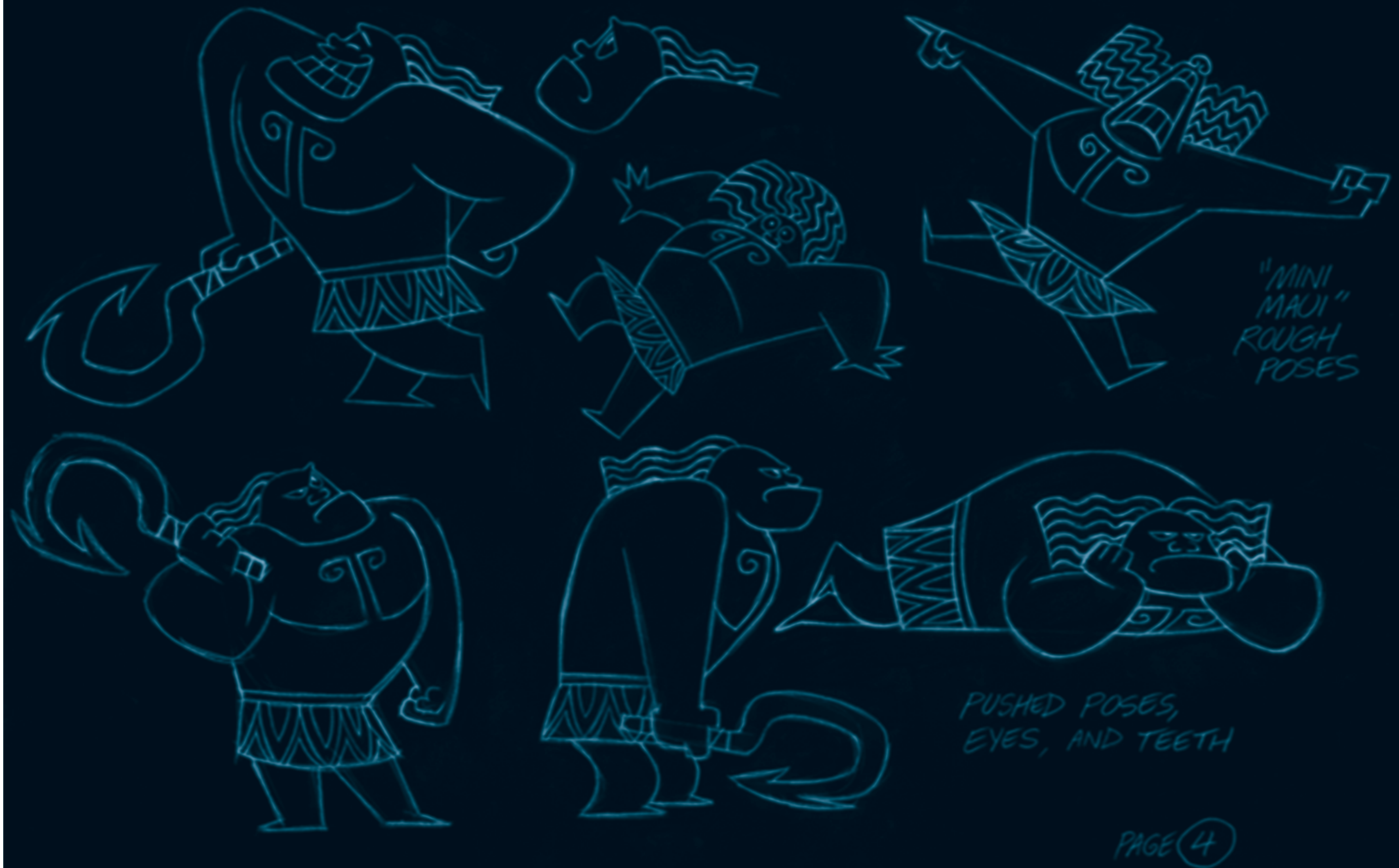
59.

RUTH
JUSTICE

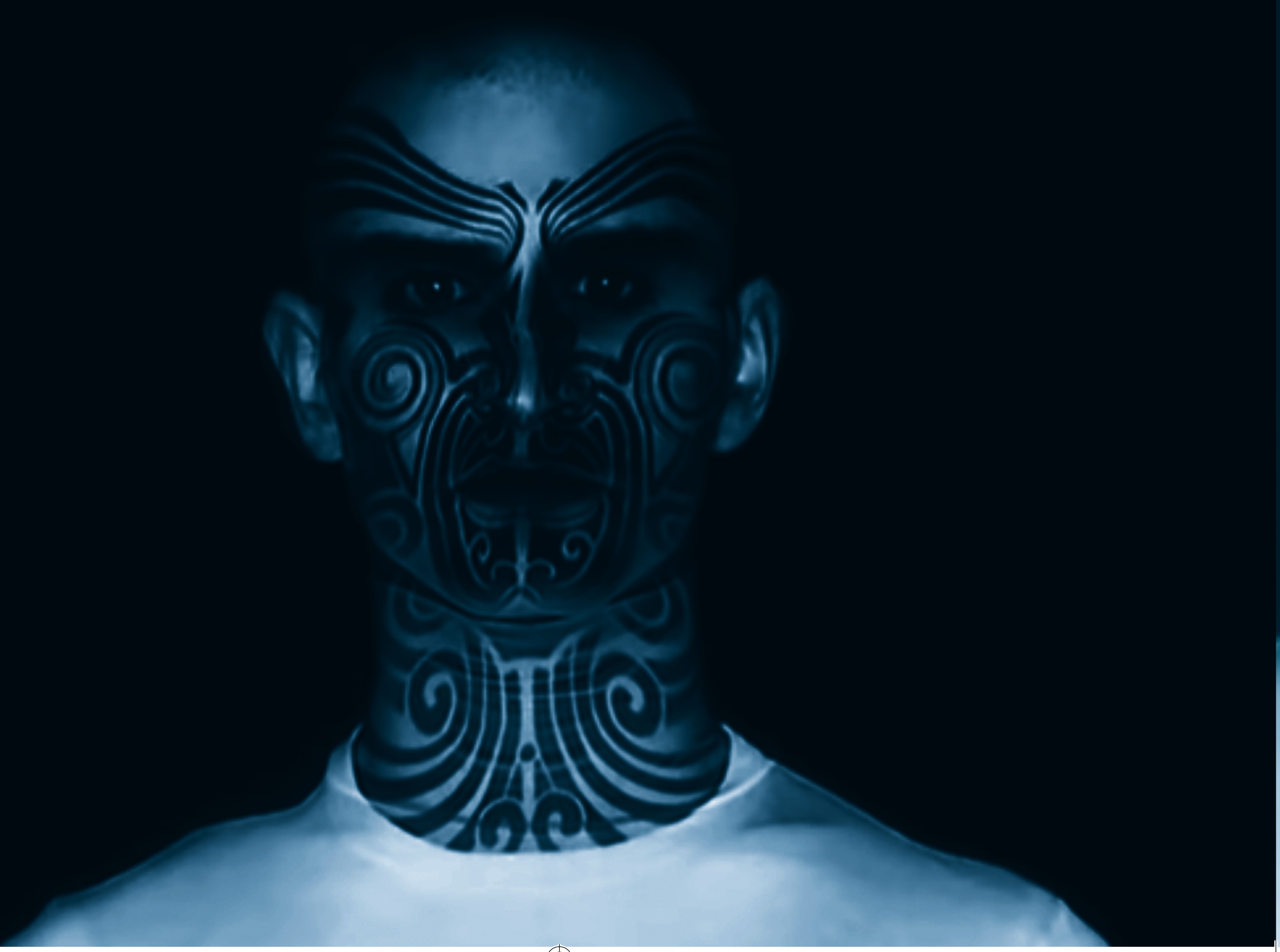

PIANCO E SOSPIRO
LA MIA PERDUTA
LIBERTA
1884
M
M.
TENDUR
RCDTME
TENDIIR
W. LA LIBERTA
ABASSO
LINFAMETA
VA LA FURIA

61.

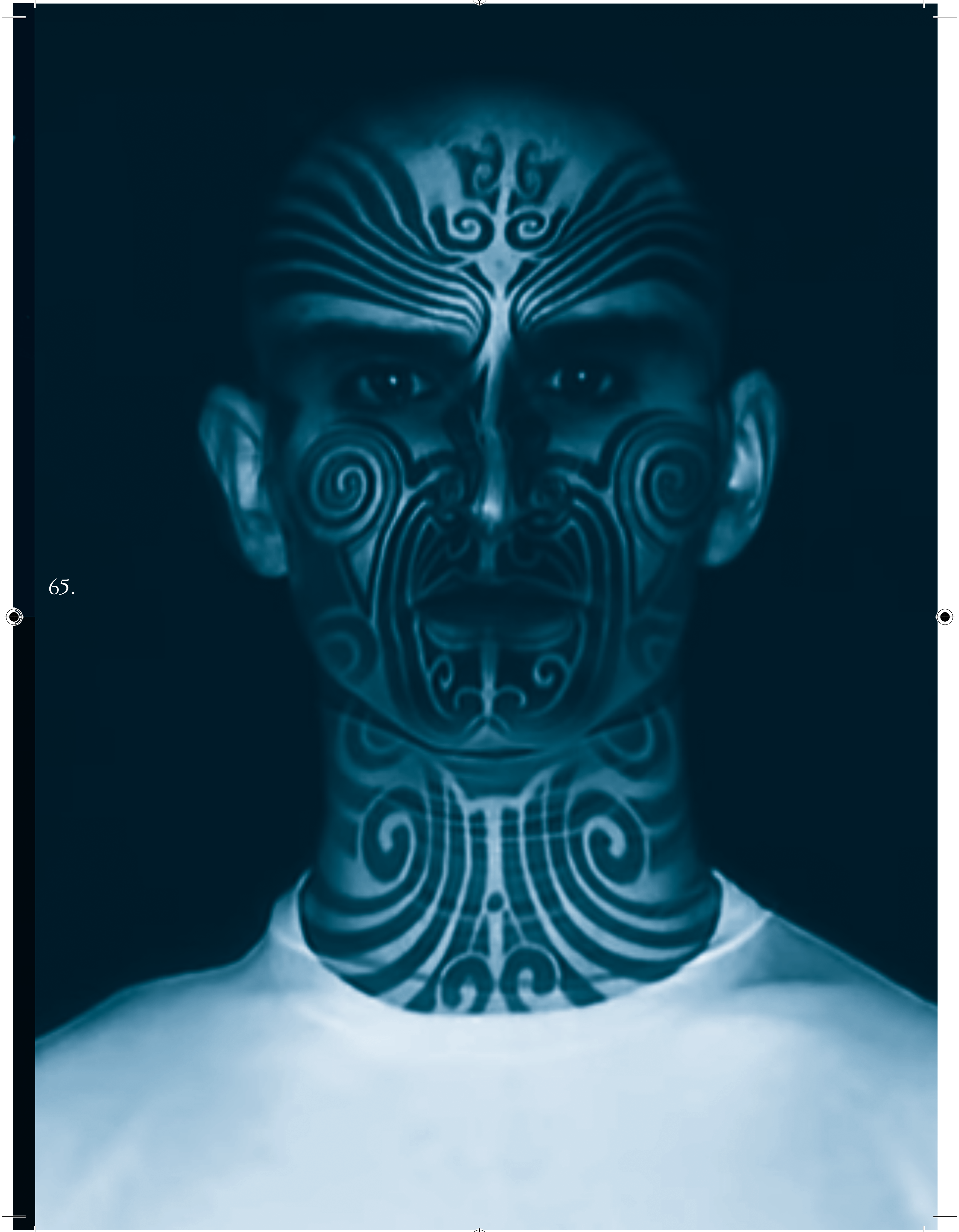

ROCDTME


"MINI MAUI" ROUGH POSES
PUSHED POSES, EYES, AND TEETH
PAGE 4

63.

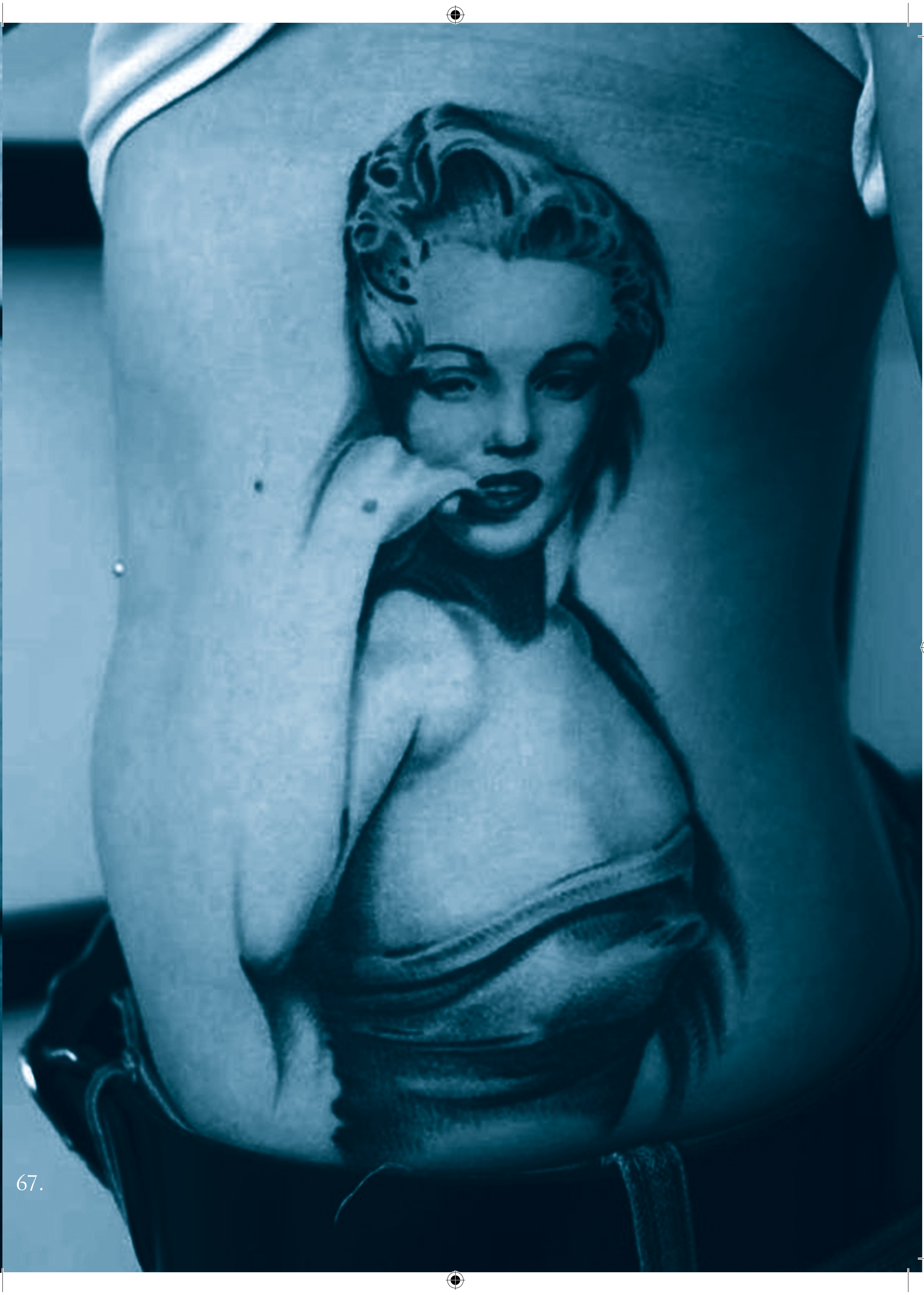


64.

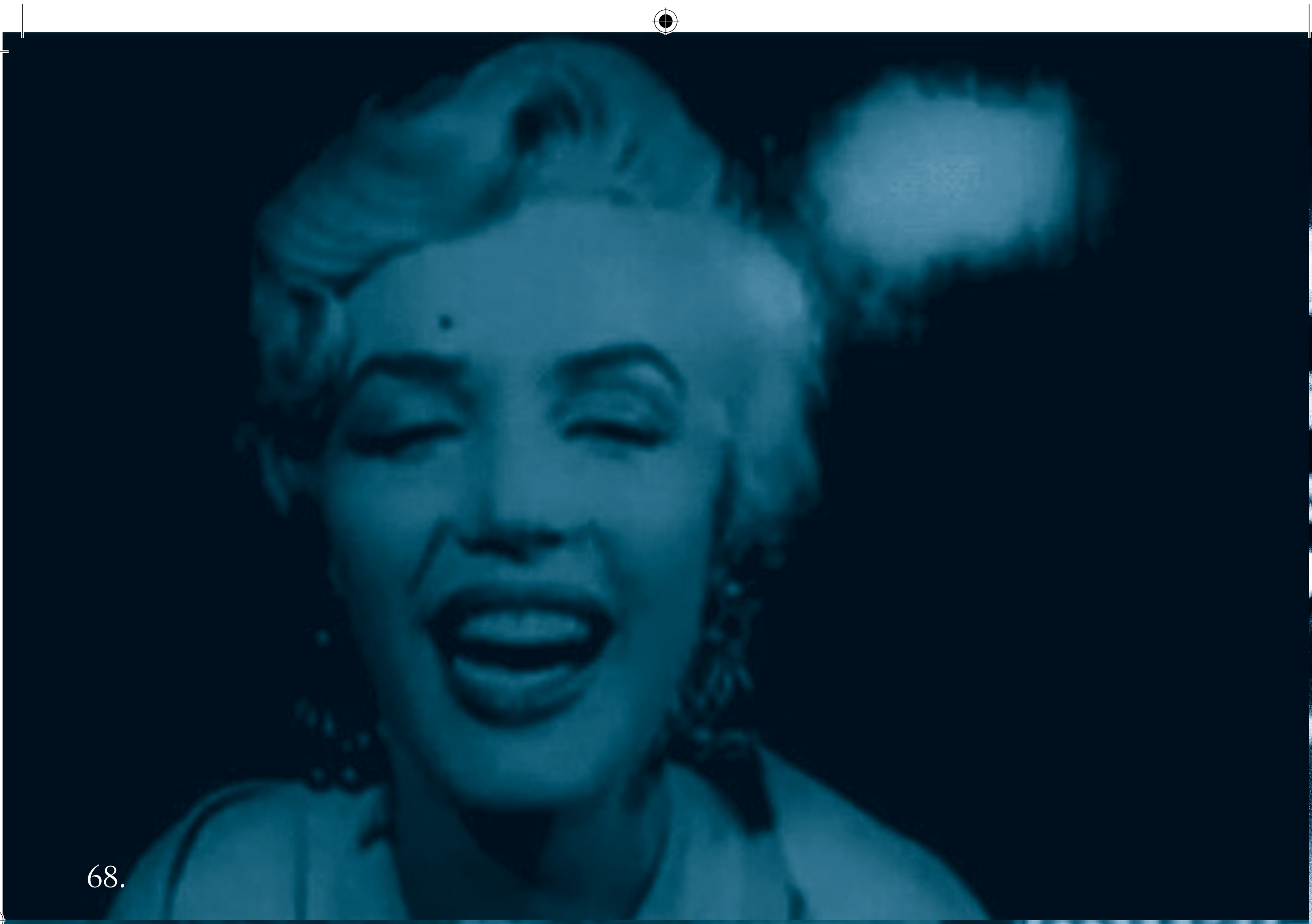


65.

HorseInMotion.EH84.com



67.

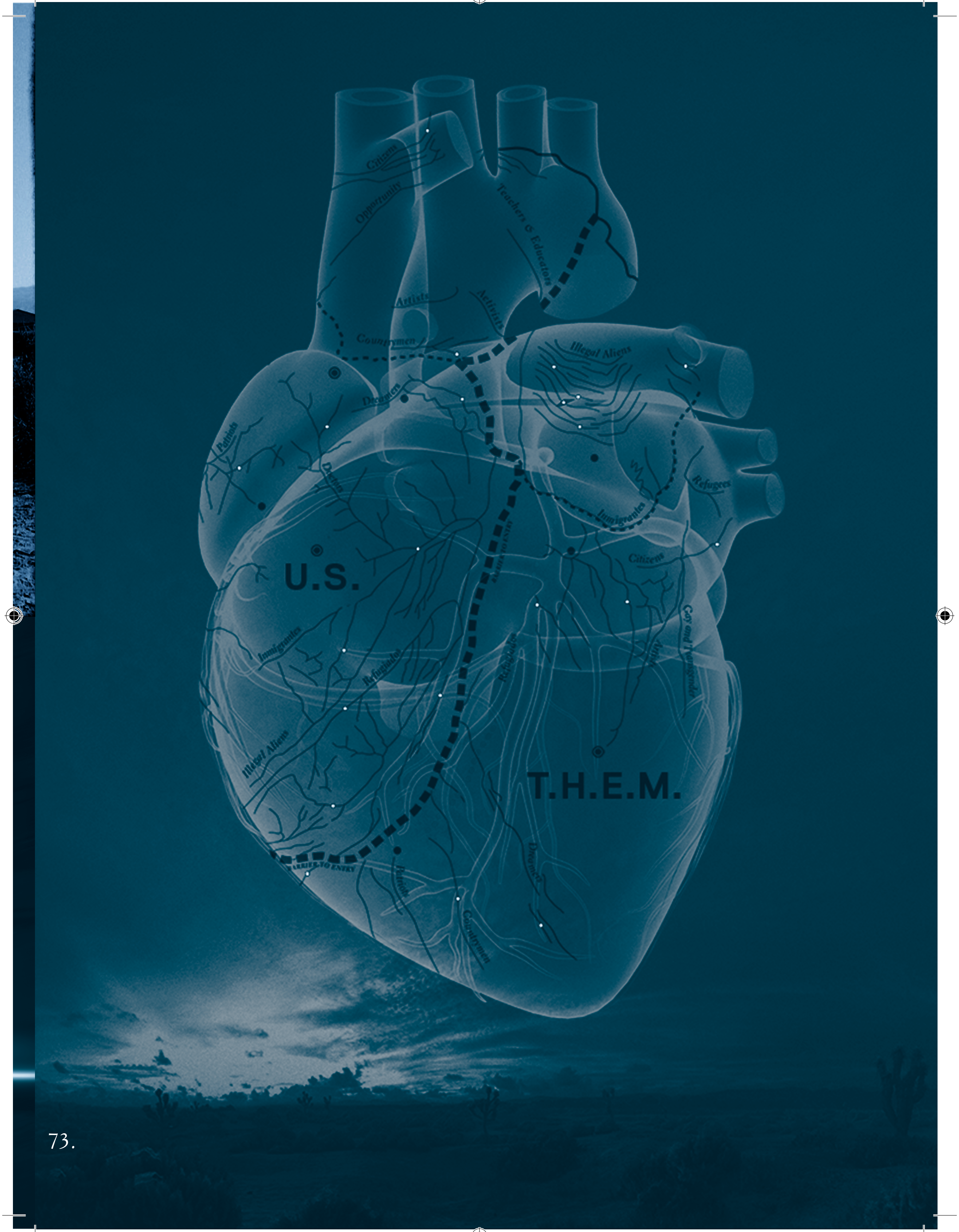


68.

69.

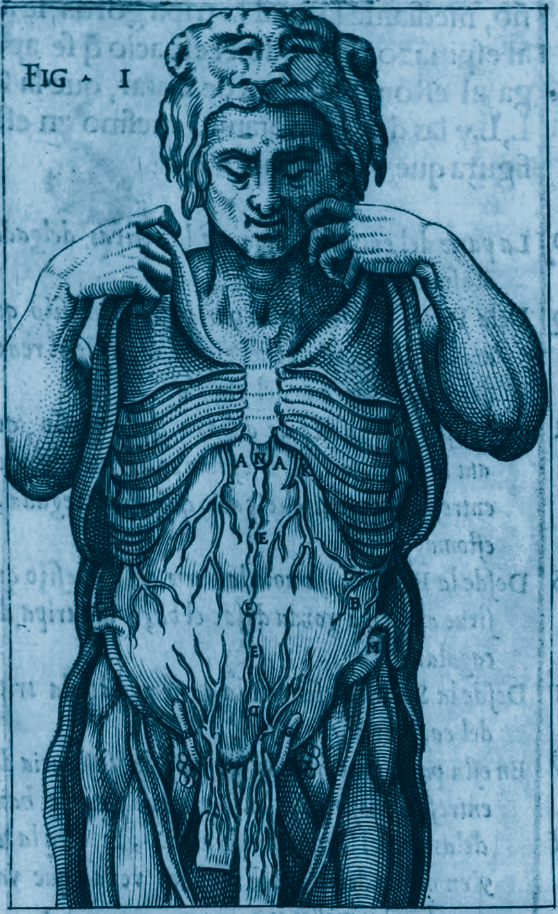
72.

71.

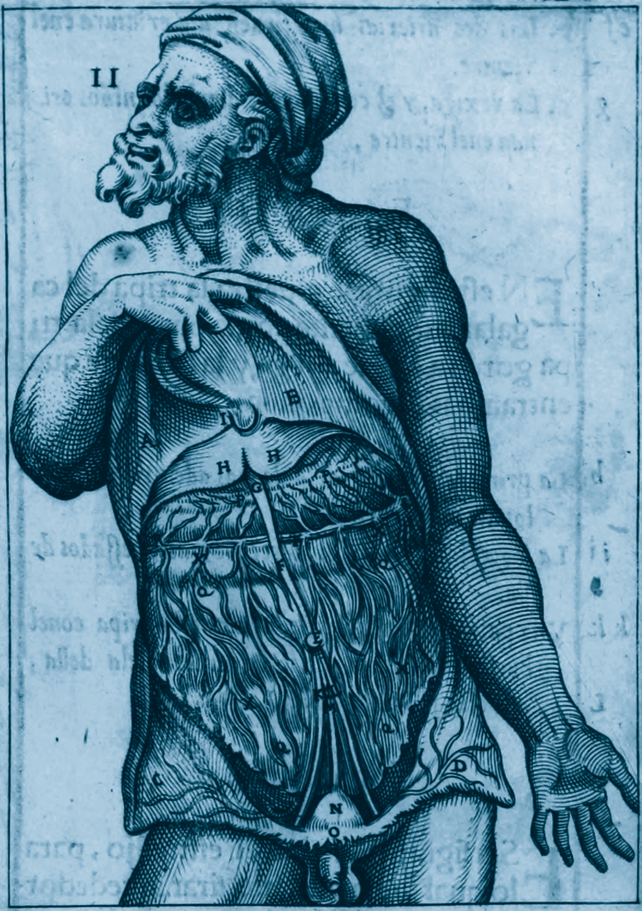

Citizens
Opportunity
Teachers & Educators
Artists
Activists
Countrymen
Illegal Aliens
Dreamers
Patriots
Doctors
Refugees
Immigrantes
Citizens
U.S.
BARRIERS TO ENTRY
Immigrantes
Refugiados
Refugiados
Artists
Gay and Transgender
Illegal Aliens
T.H.E.M.
BARRIERS TO ENTRY
Patriots
Dreamers
Countrymen

TAB. PRIMERA DEL LIB. TERZERO

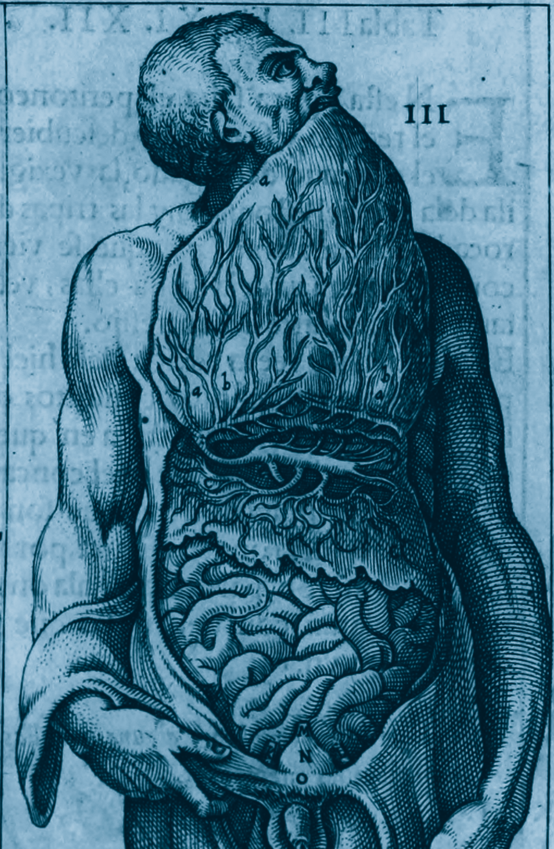
FIG. I



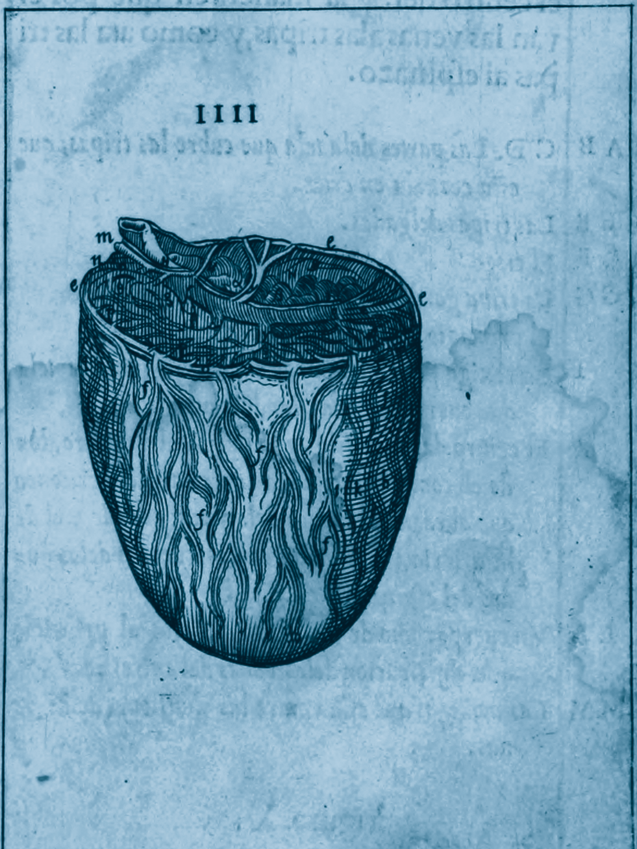
II



III



IIII

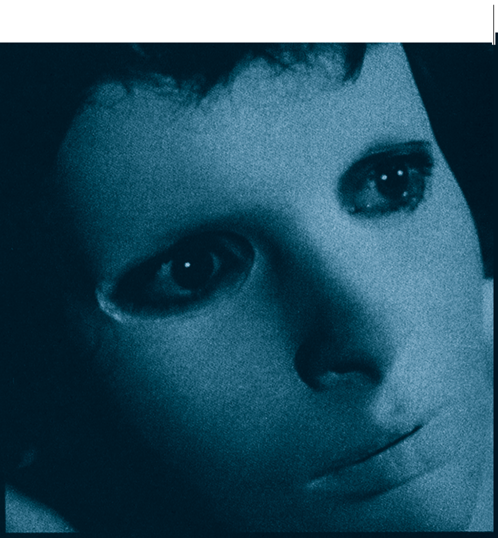


P iii

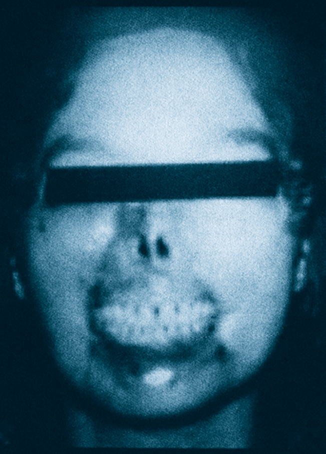
75.

①

②



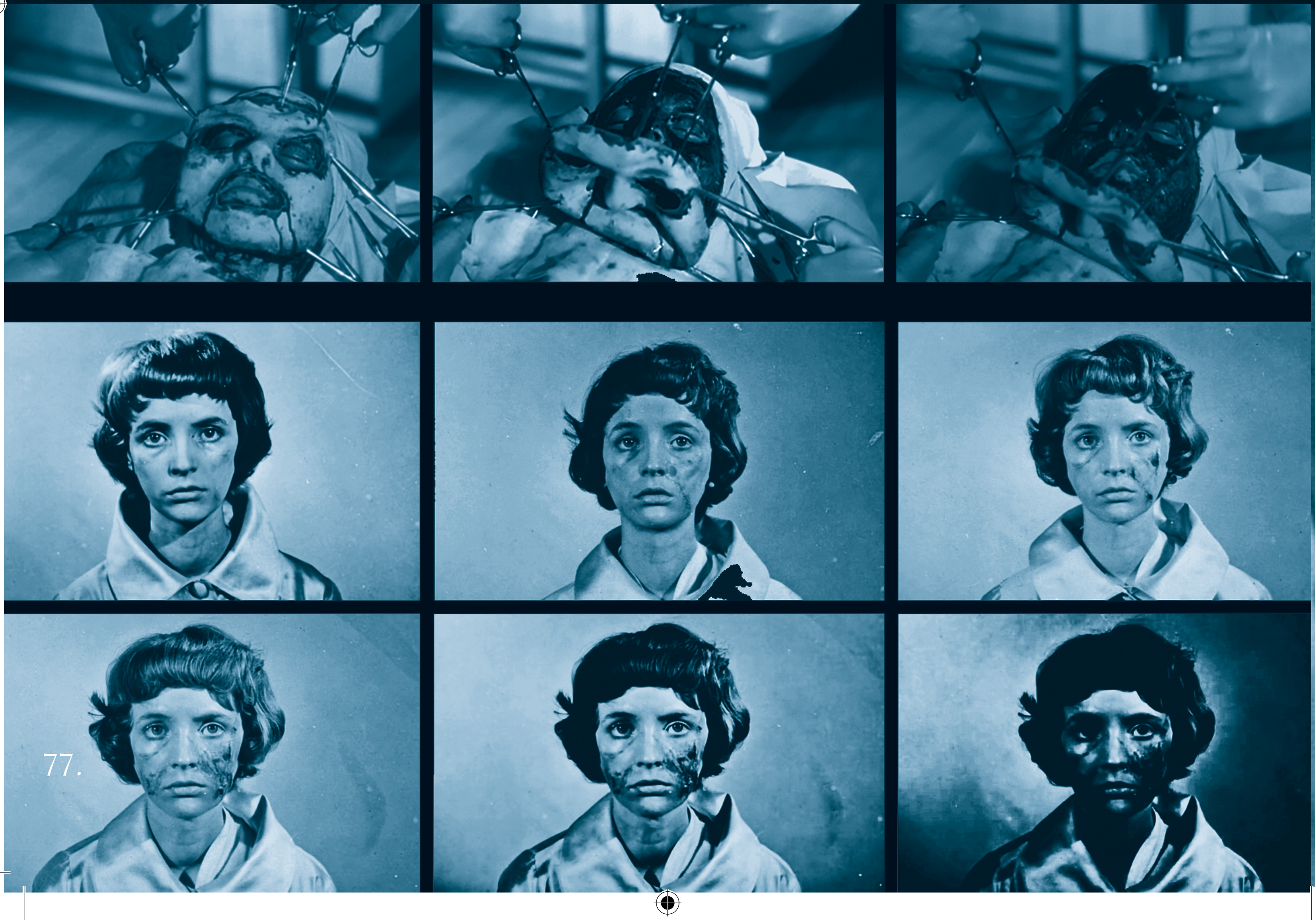
③



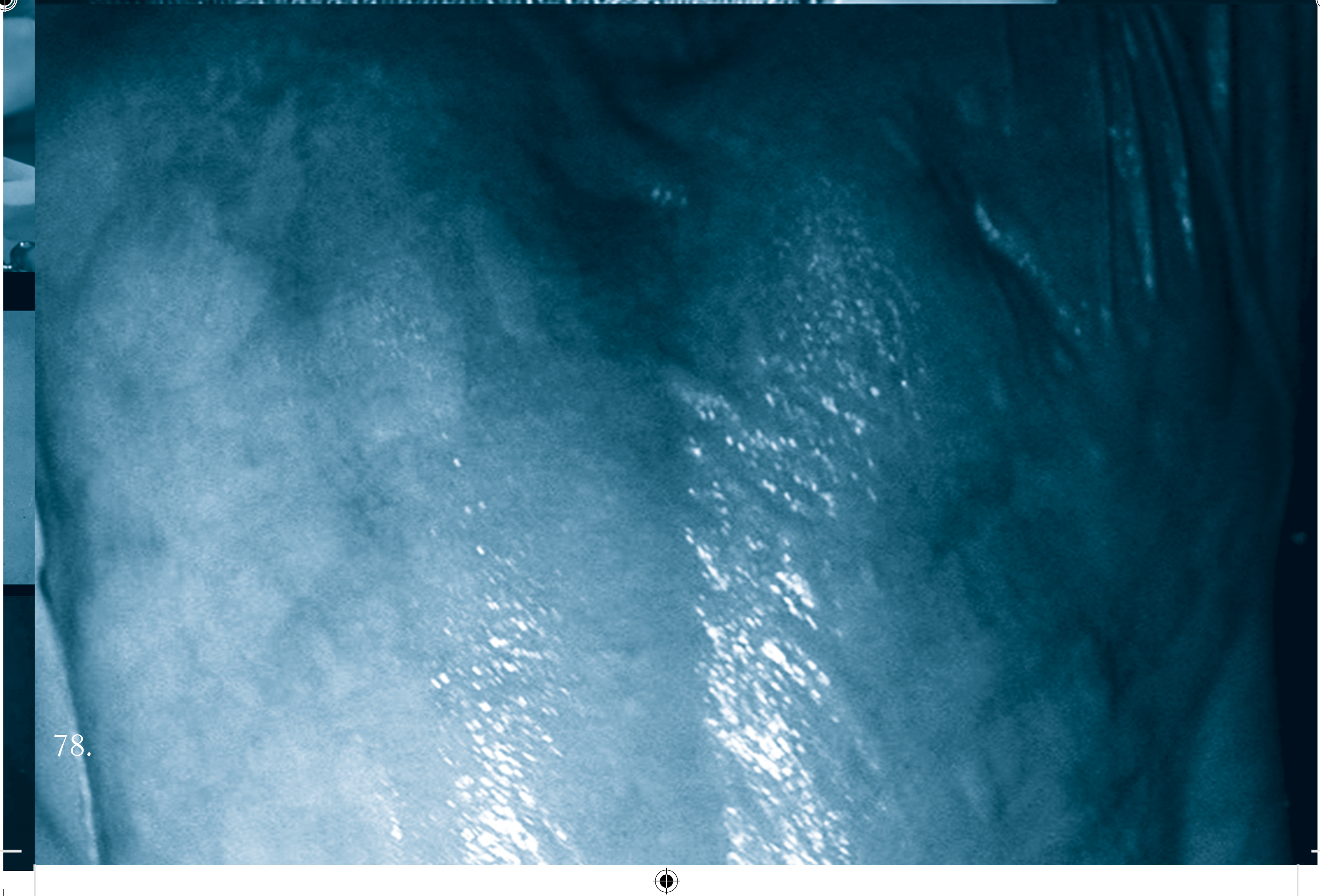
④

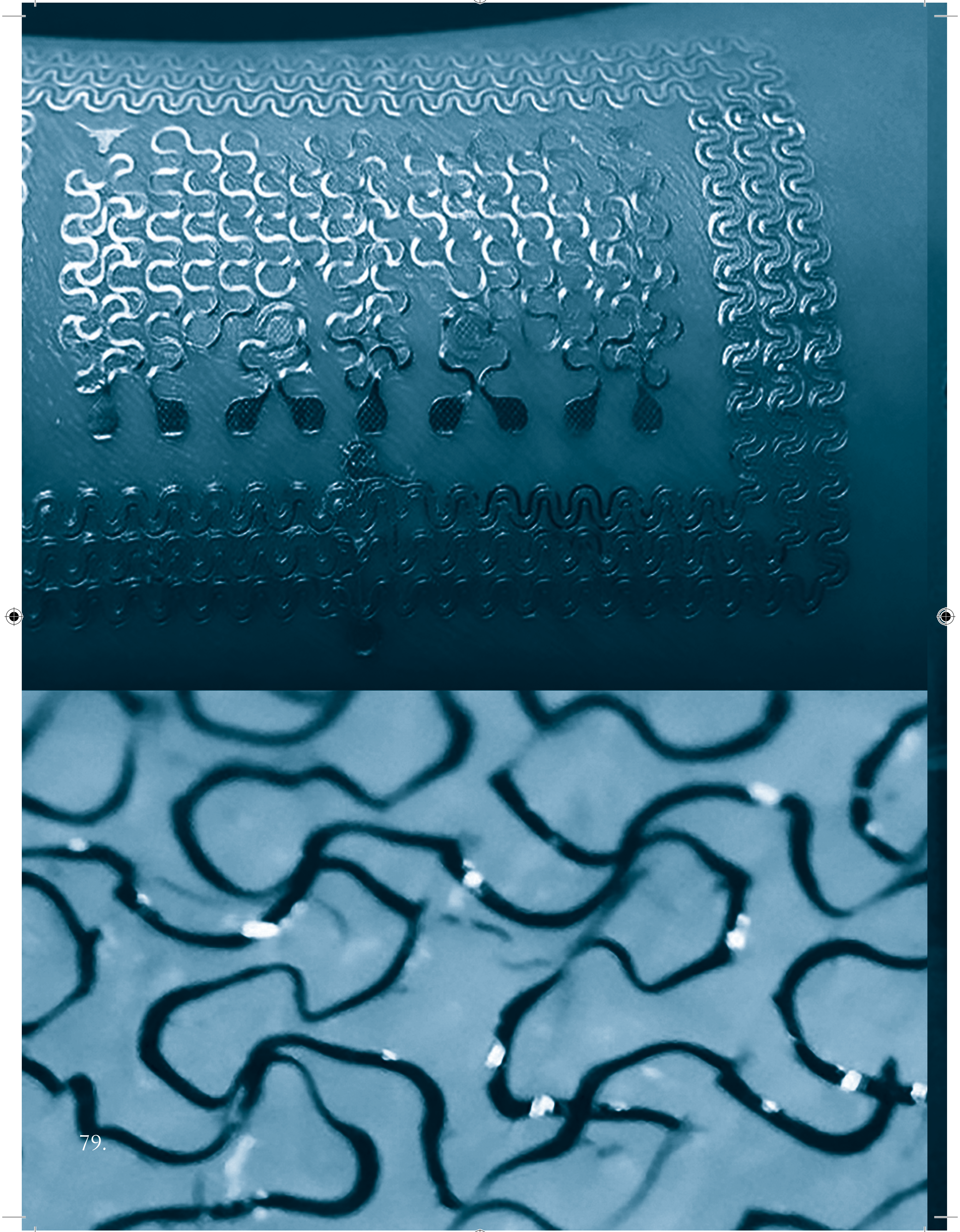
⑤

76.



77.

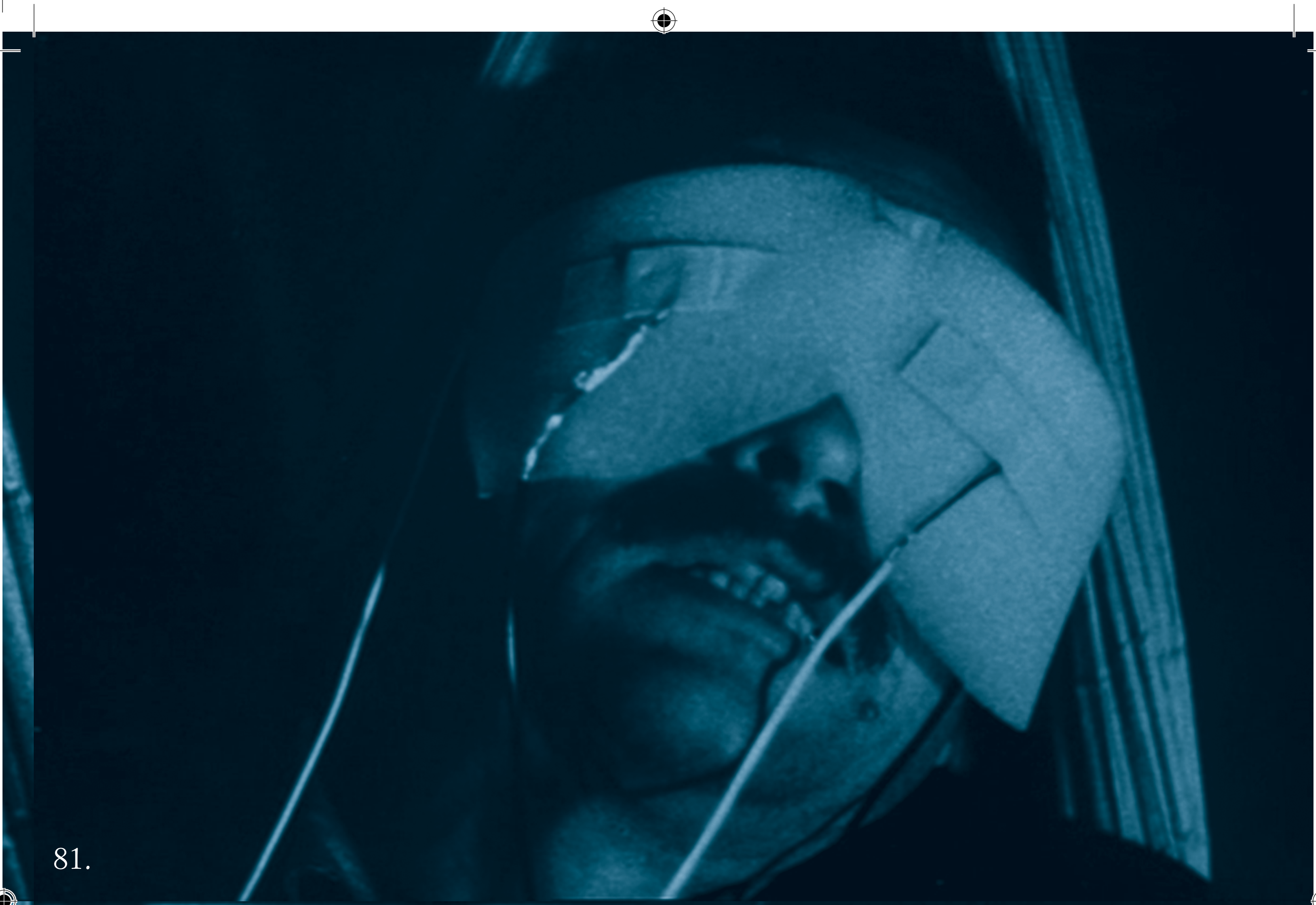




79.

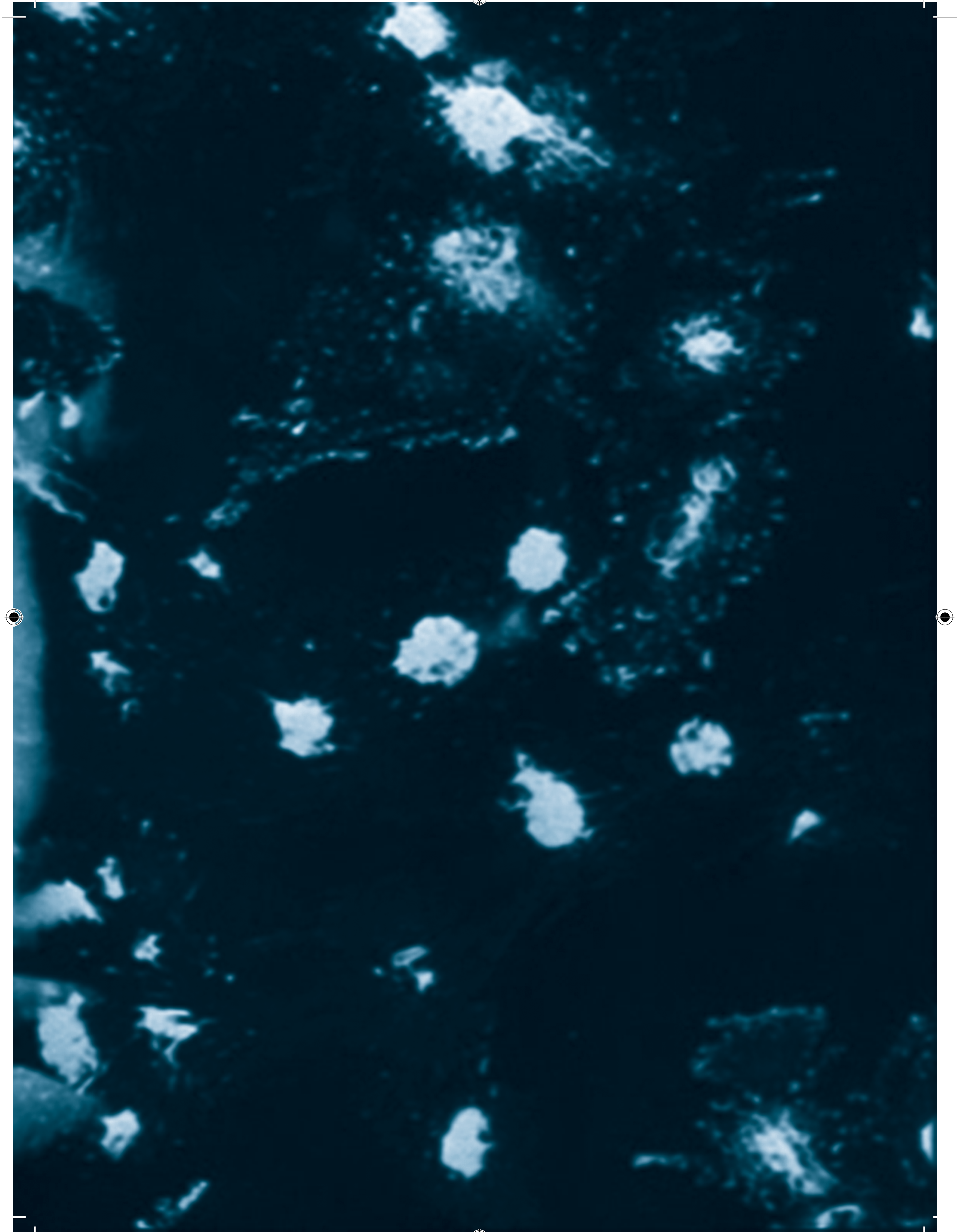
80.

82.



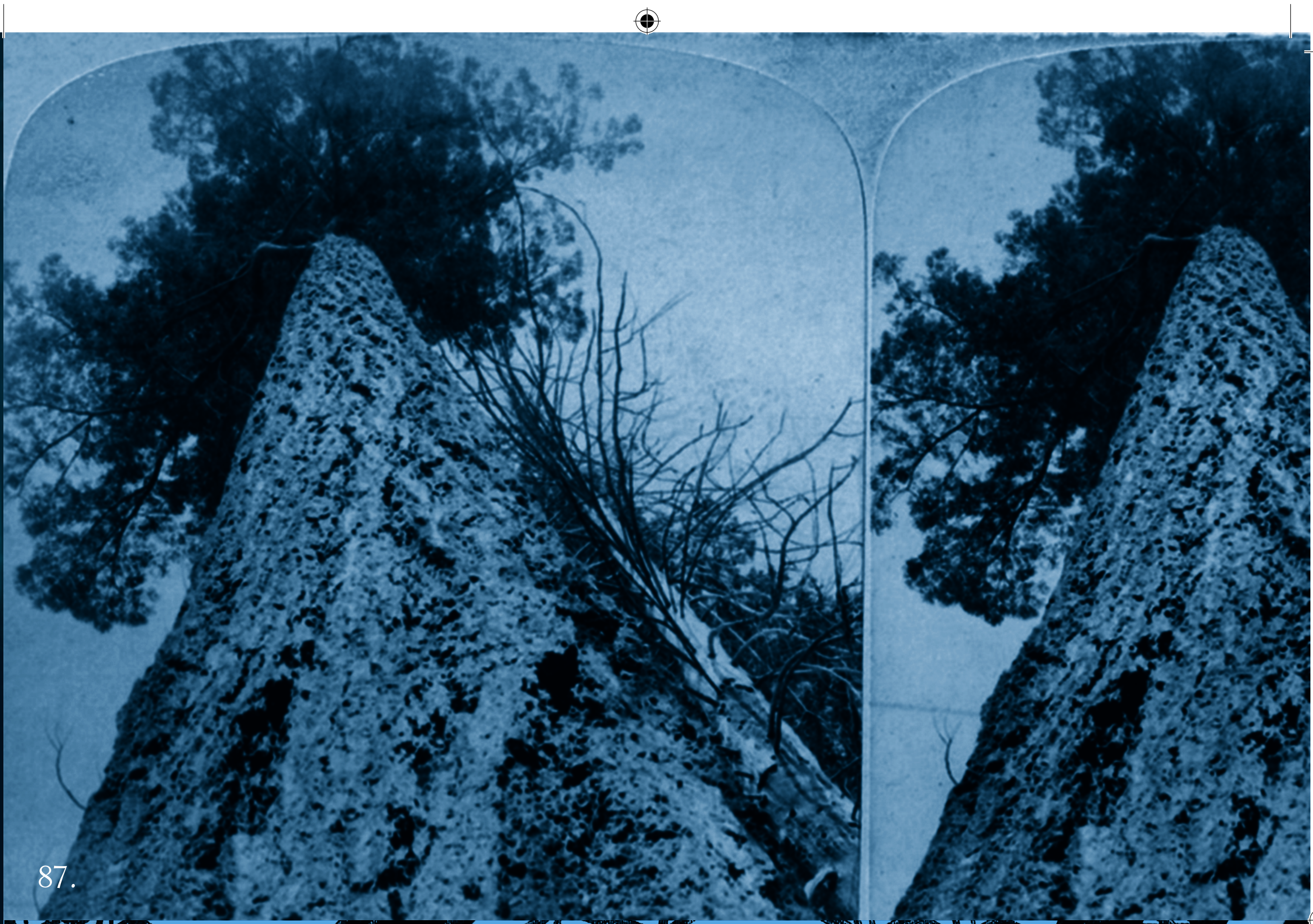
81.

83.

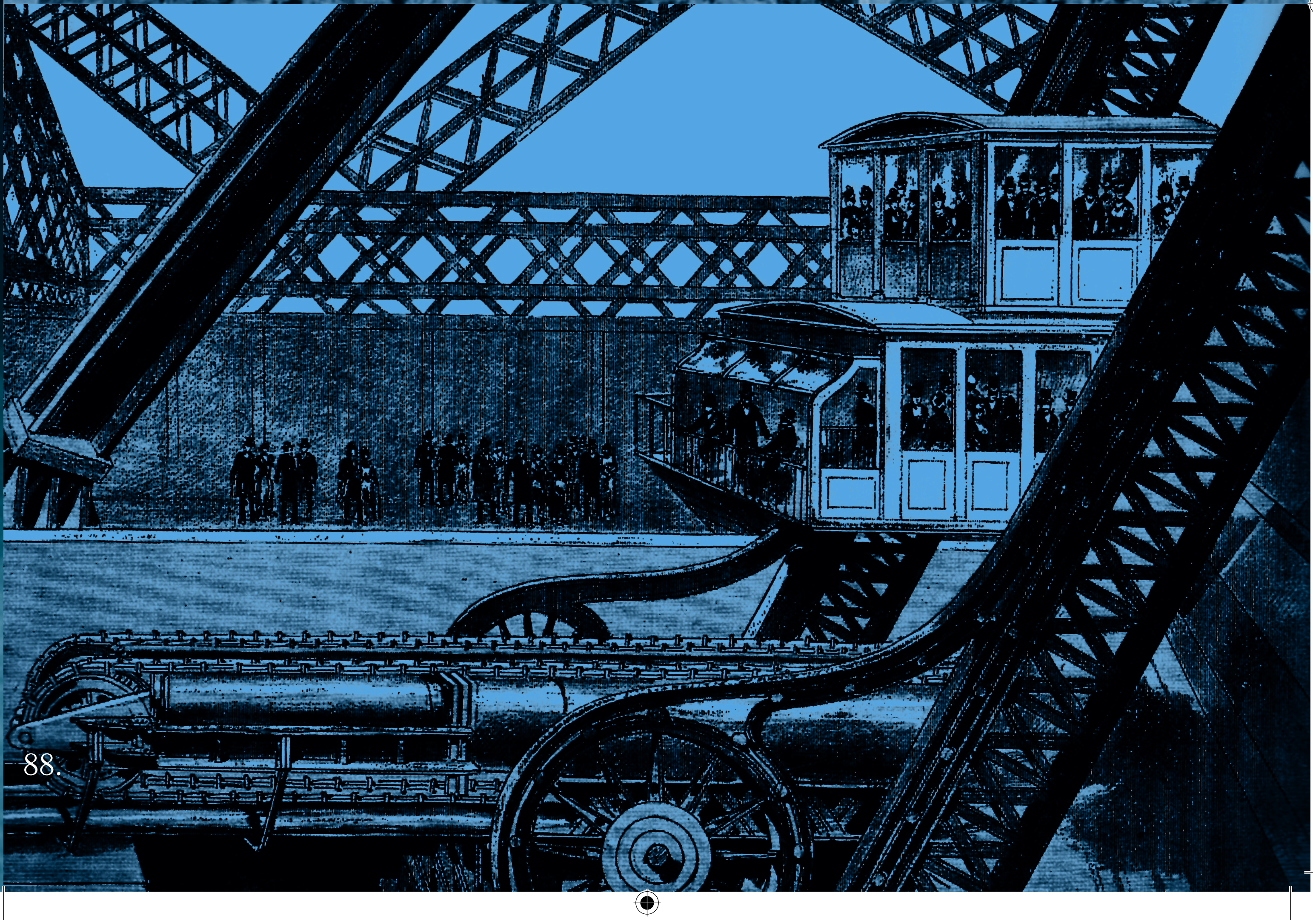


84.

85.



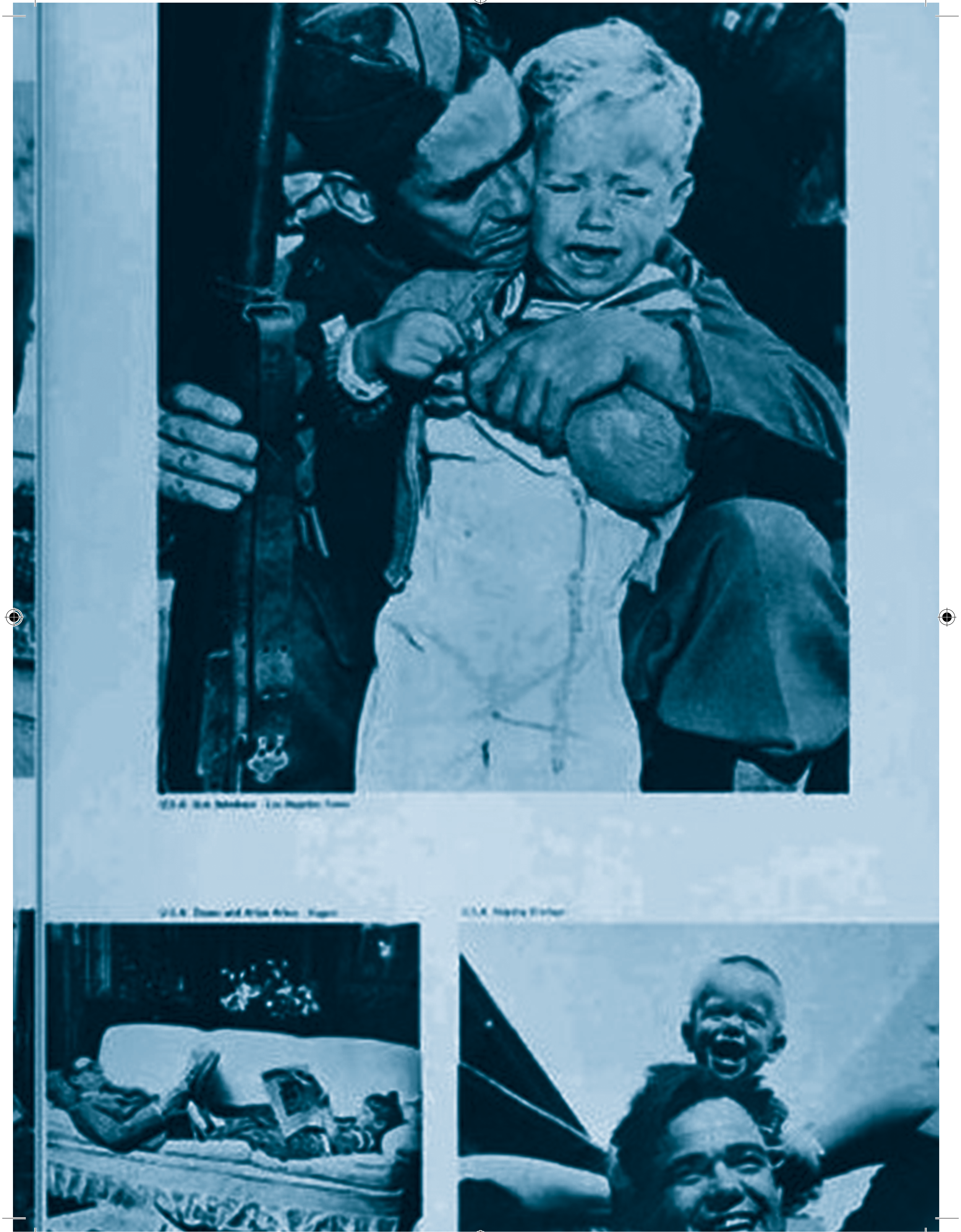
87.

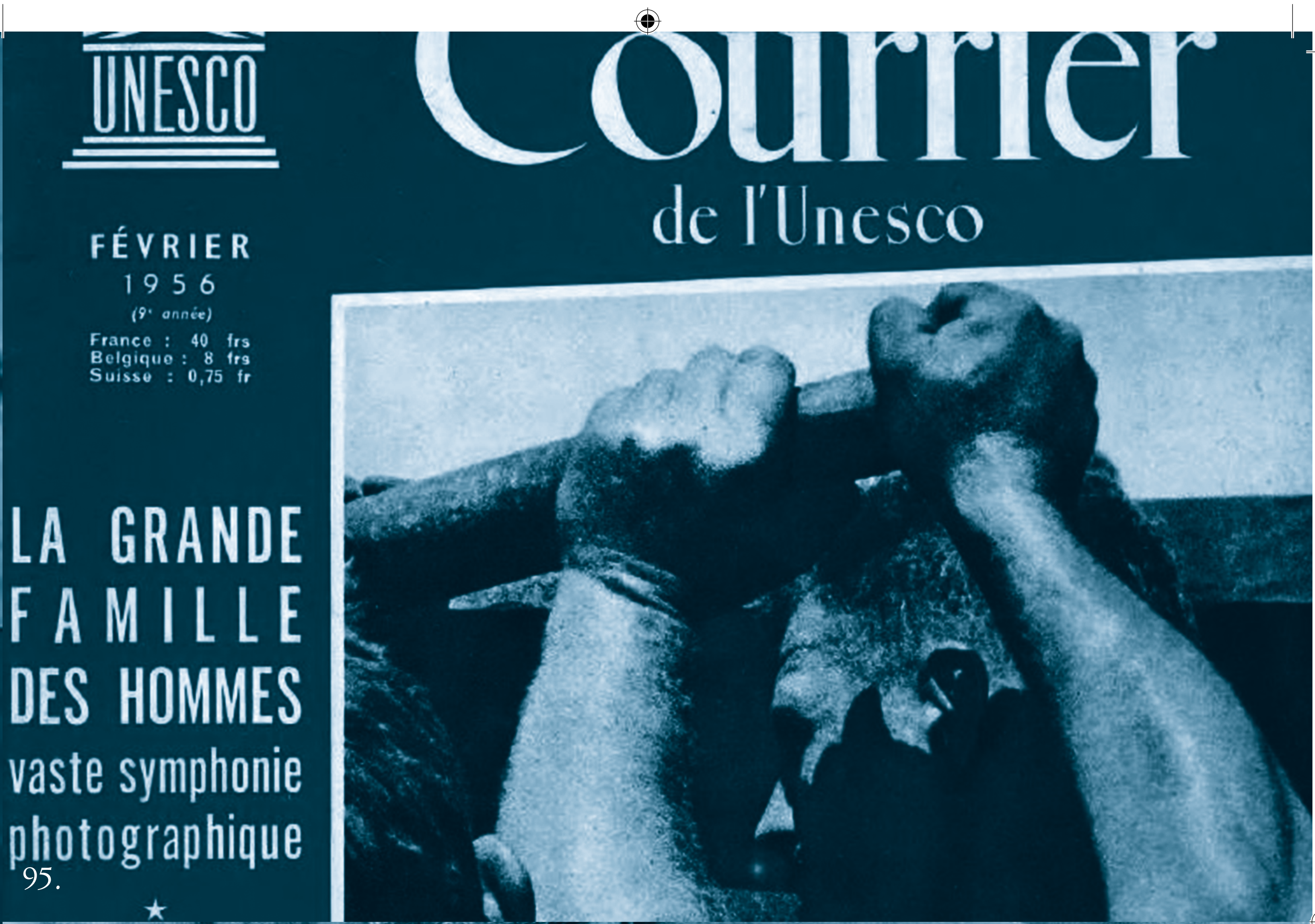


88.

02579

0025





UNESCO

Courrier

de l'Unesco

FÉVRIER
1956
(9e année)

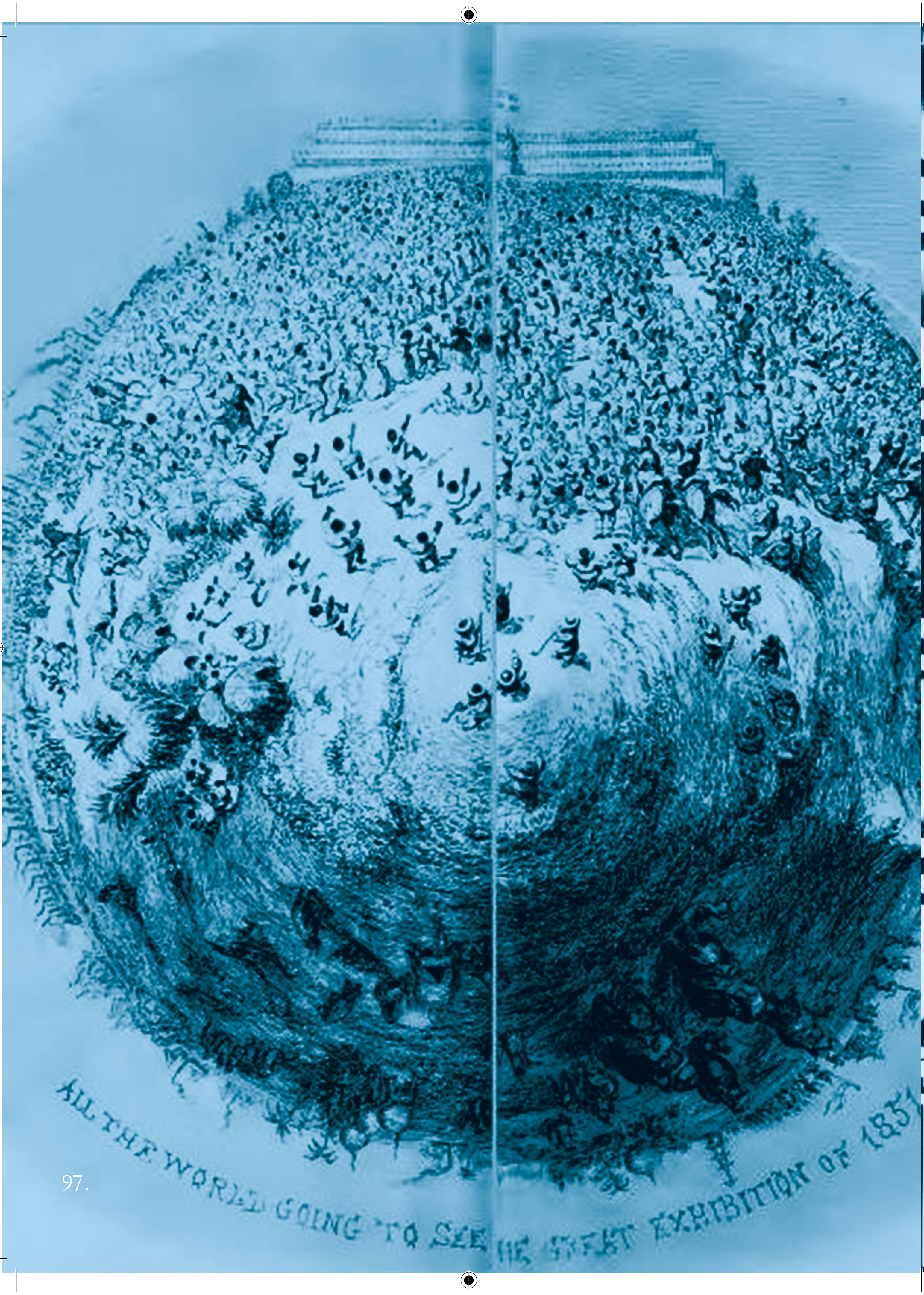
France : 40 frs
Belgique : 8 frs
Suisse : 0,75 fr

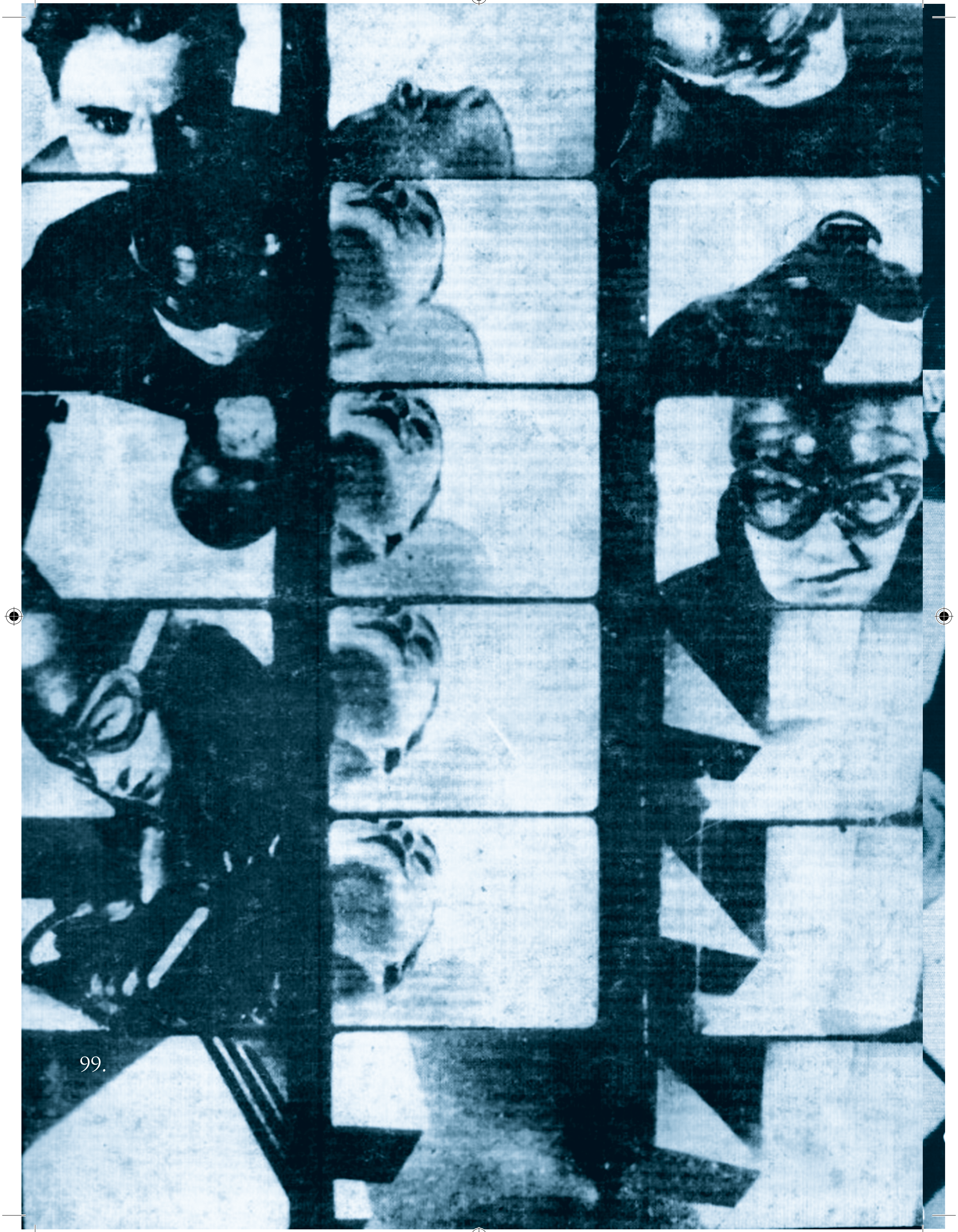
LA GRANDE
FAMILLE
DES HOMMES
vaste symphonie
photographique

★

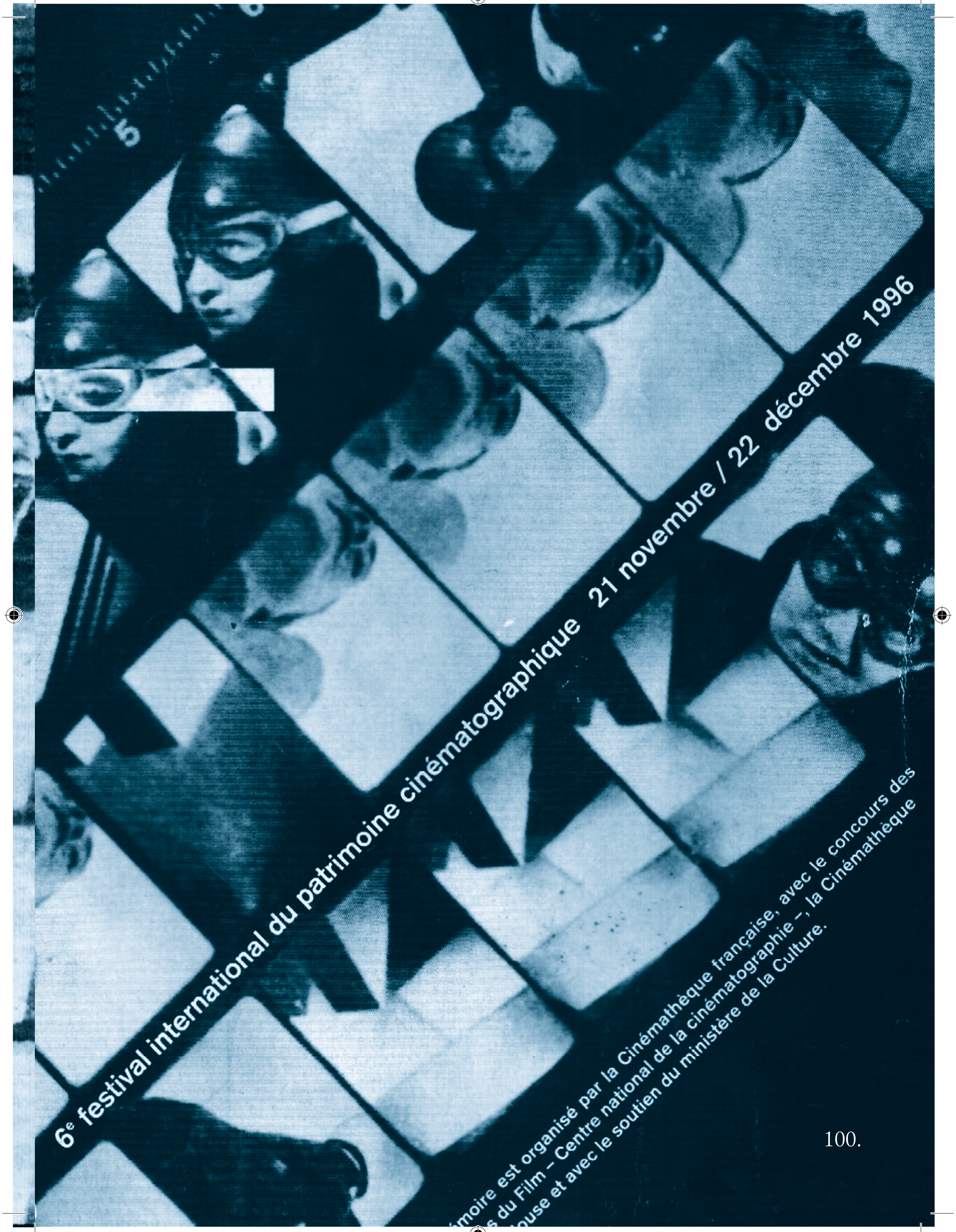
95.

96.

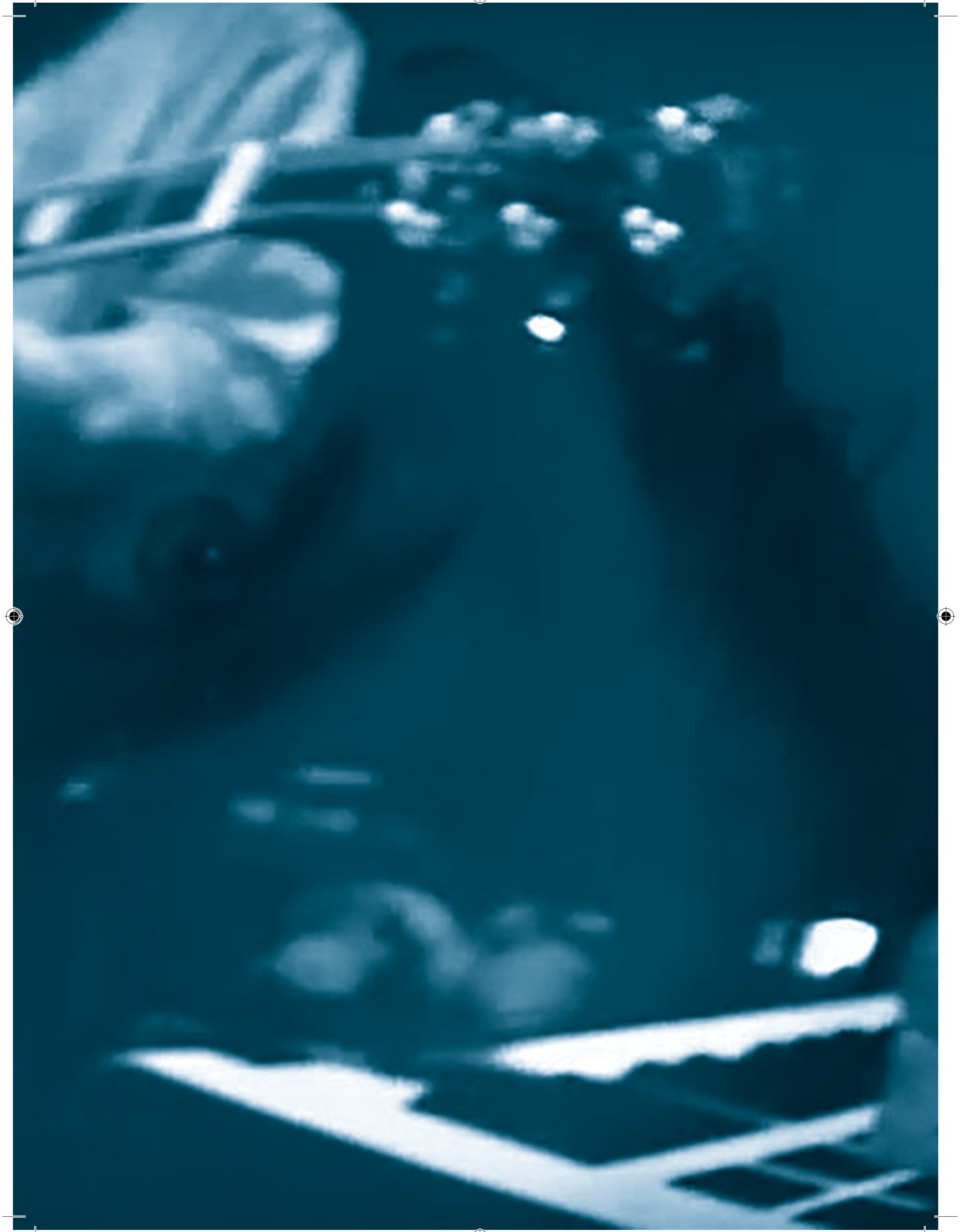

ALL THE WORLD GOING TO SEE THE GREAT EXHIBITION OF 1851

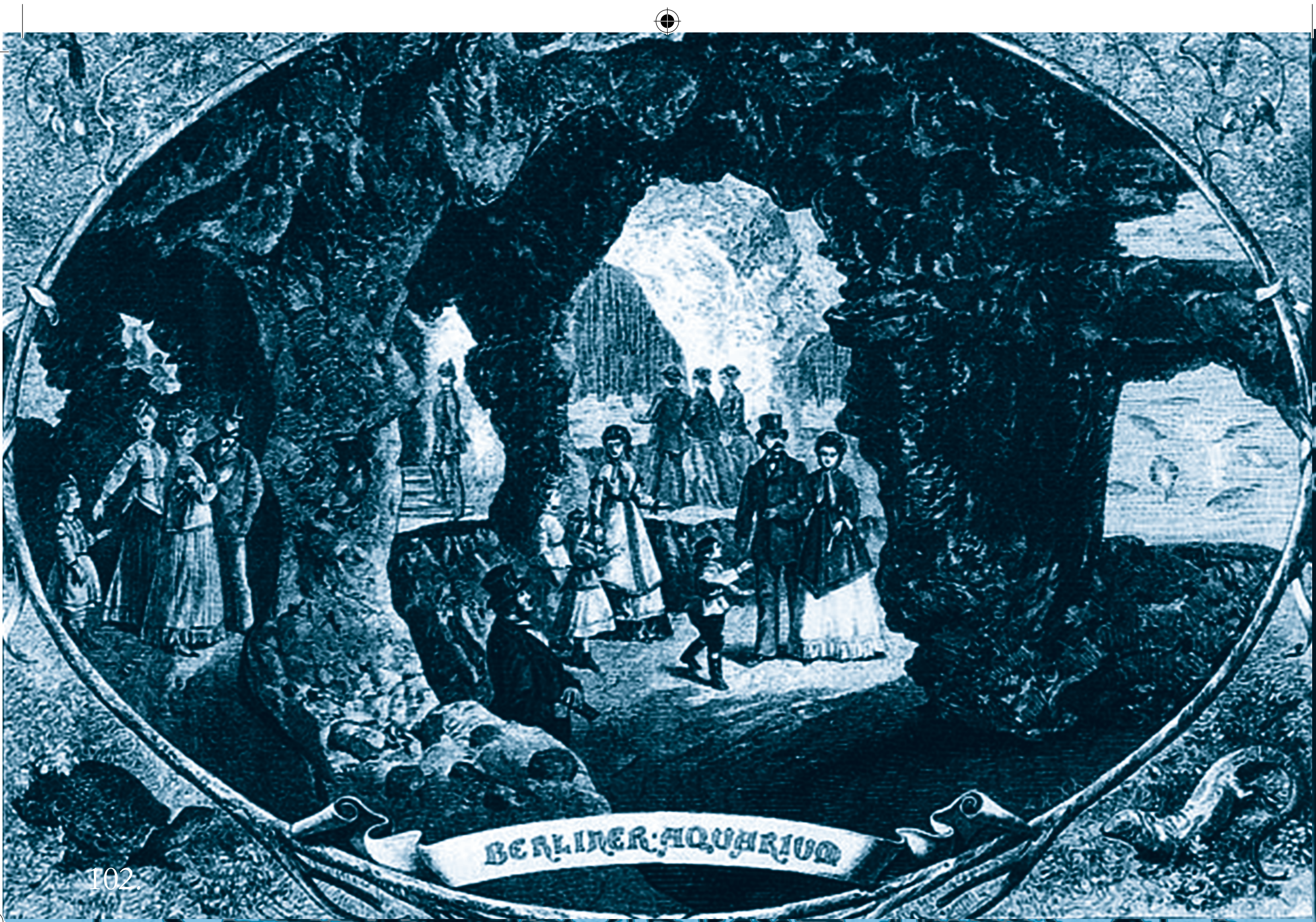


99.

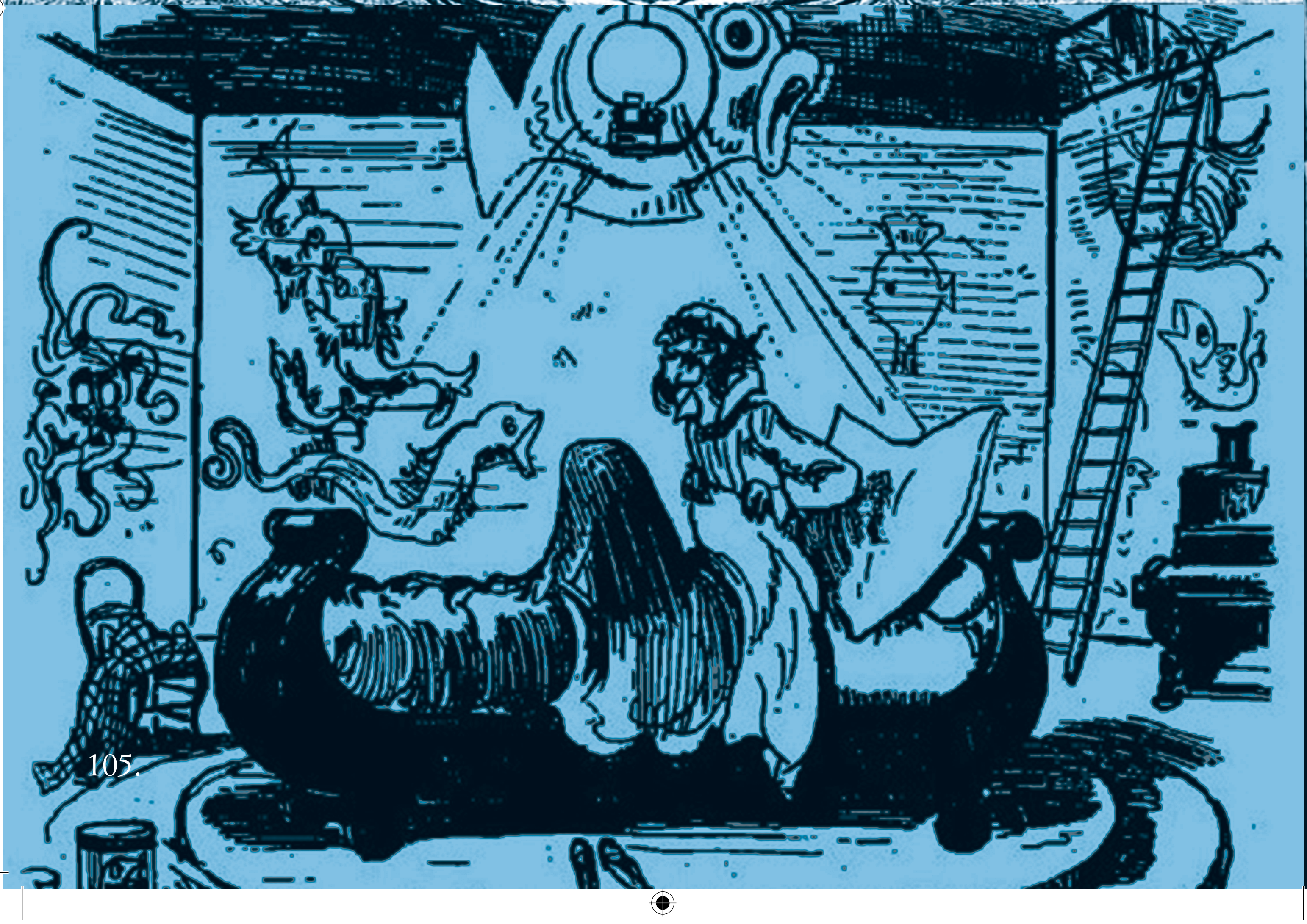

5
6
6e festival international du patrimoine cinématographique 21 novembre / 22 décembre 1996
émoire est organisé par la Cinémathèque française, avec le concours des
s du Film – Centre national de la cinématographie –, la Cinémathèque
ouse et avec le soutien du ministère de la Culture.

100.

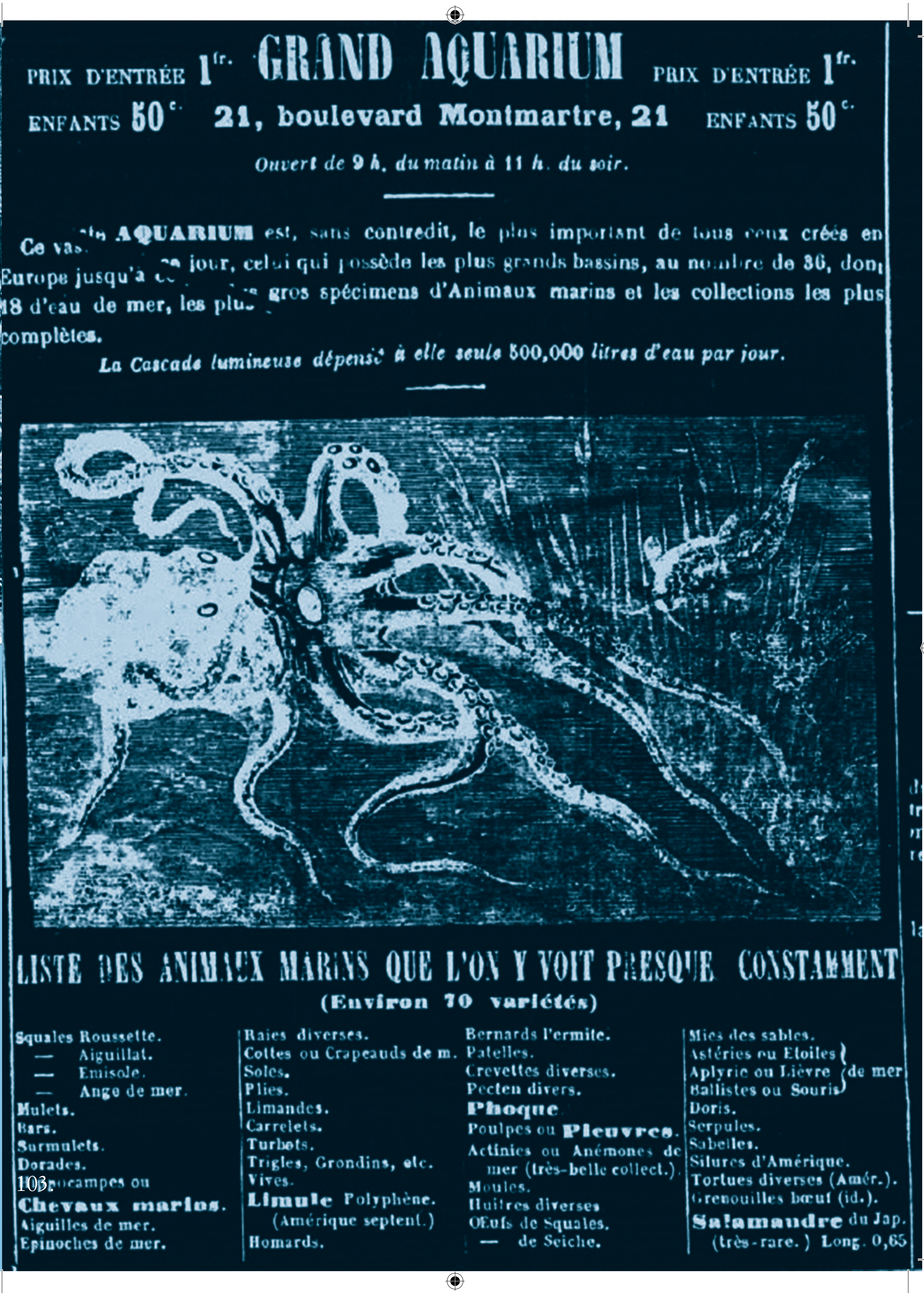



BERLINER AQUARIUM

102.



105.



PRIX D'ENTRÉE 1^fr. GRAND AQUARIUM PRIX D'ENTRÉE 1^fr.

ENFANTS 50^c. **21, boulevard Montmartre, 21** ENFANTS 50^c.

Ouvert de 9 h. du matin à 11 h. du soir.

Ce vaste **AQUARIUM** est, sans contredit, le plus important de tous ceux créés en Europe jusqu'à ce jour, celui qui possède les plus grands bassins, au nombre de 36, dont 18 d'eau de mer, les plus gros spécimens d'Animaux marins et les collections les plus complètes.

La Cascade lumineuse dépense à elle seule 500,000 litres d'eau par jour.

LISTE DES ANIMAUX MARINS QUE L'ON Y VOIT PRESQUE CONSTAMMENT

(Environ 70 variétés)

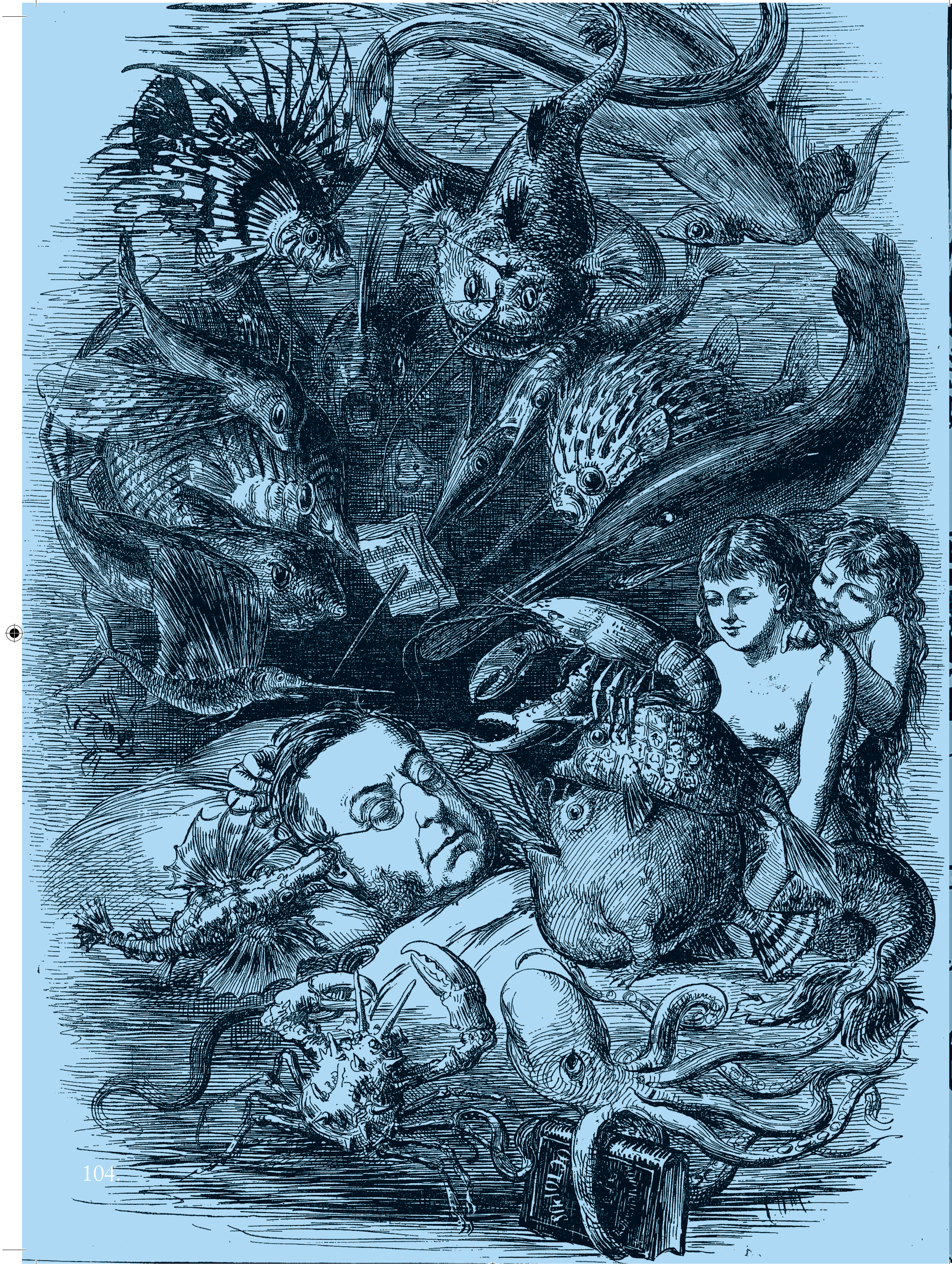
Squales Roussette.
— Aiguillat.
— Emisole.
— Ange de mer.
Mulets.
Bars.
Surmulets.
Dorades.
Hippocampes ou
Chevaux marins.
Aiguilles de mer.
Epinoches de mer.

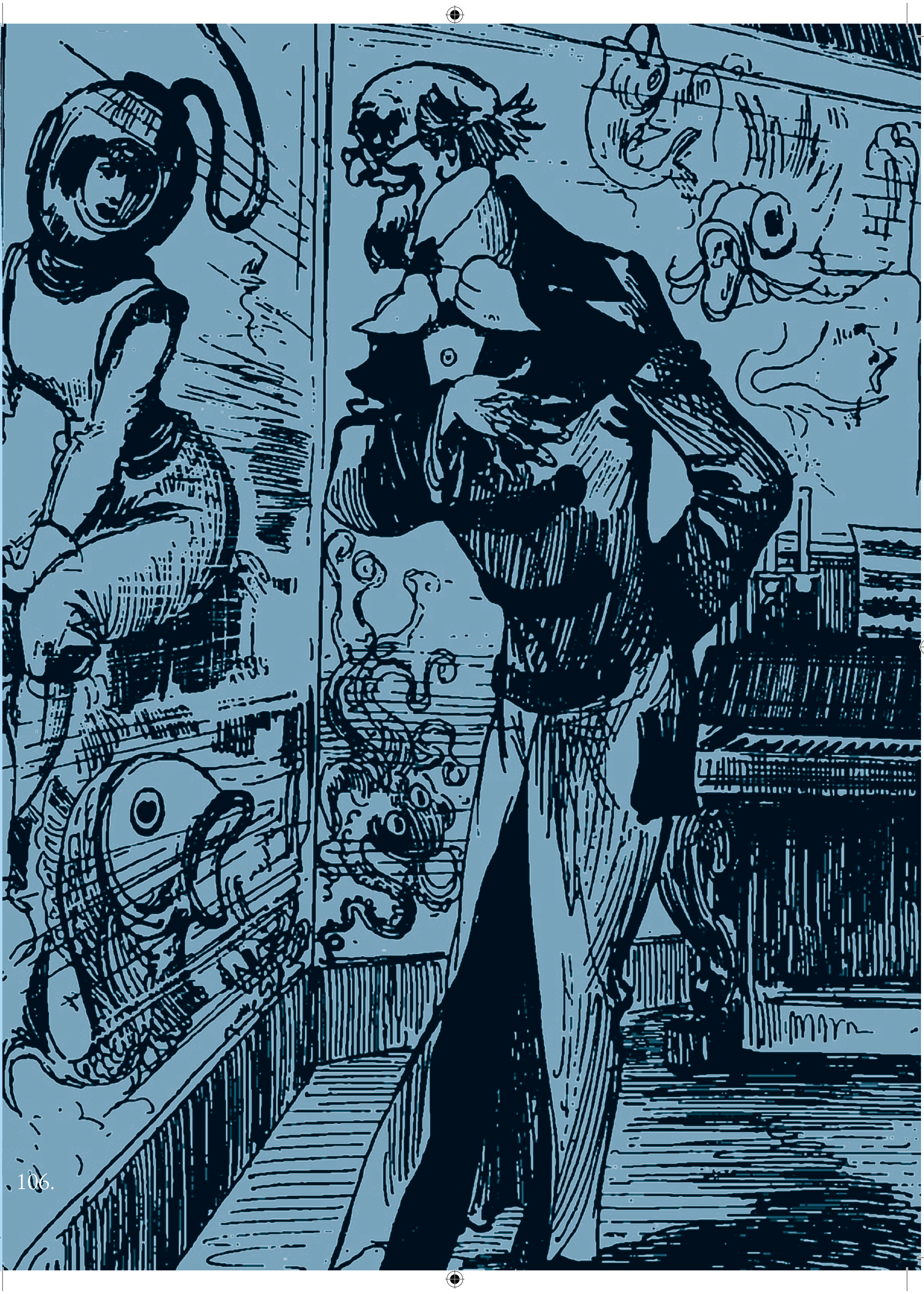
Raies diverses.
Cottes ou Crapeauds de m.
Soles.
Plies.
Limandes.
Carrelets.
Turbots.
Trigles, Grondins, etc.
Vives.
Limule Polyphène.
(Amérique septent.)
Homards.

Bernards l'ermite.
Patelles.
Crevettes diverses.
Pecten divers.
Phoque.
Poulpes ou **Pleuvres.**
Actinies ou Anémones de mer (très-belle collect.).
Moules.
Huitres diverses
Œufs de Squales.
— de Seiche.

Mies des sables.
Astéries ou Etoiles } de mer
Aplyrie ou Lièvre } de mer
Ballistes ou Souris } de mer
Doris.
Serpules.
Sabelles.
Silures d'Amérique.
Tortues diverses (Amér.).
Grenouilles bœuf (id.).
Salamandre du Jap. (très-rare.) Long. 0,65

103.





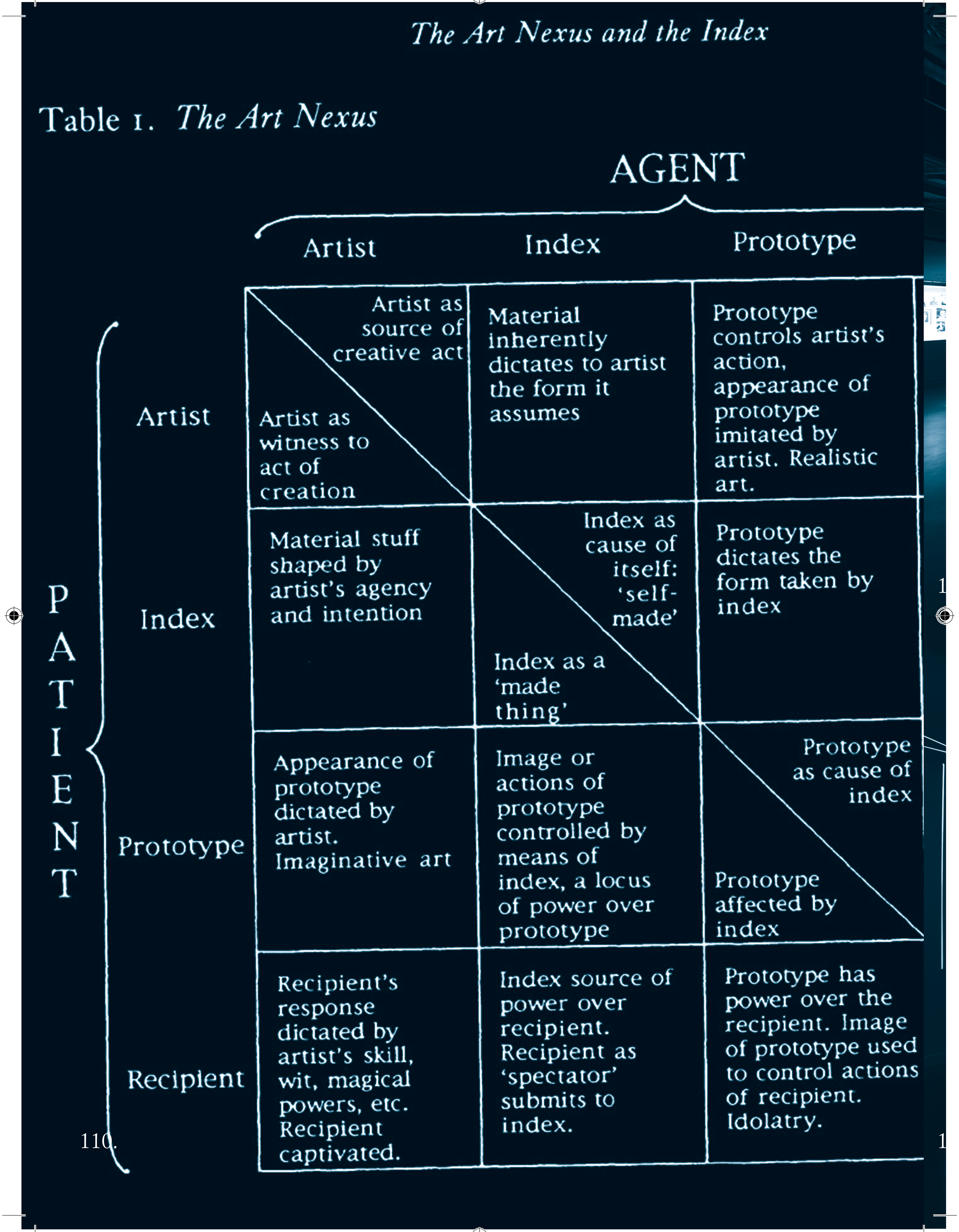


Table 1. *The Art Nexus*

PATIENT \ AGENT	Artist	Index	Prototype
Artist	Artist as source of creative act Artist as witness to act of creation	Material inherently dictates to artist the form it assumes	Prototype controls artist's action, appearance of prototype imitated by artist. Realistic art.
Index	Material stuff shaped by artist's agency and intention	Index as cause of itself: 'self-made' Index as a 'made thing'	Prototype dictates the form taken by index
Prototype	Appearance of prototype dictated by artist. Imaginative art	Image or actions of prototype controlled by means of index, a locus of power over prototype	Prototype as cause of index Prototype affected by index
Recipient	Recipient's response dictated by artist's skill, wit, magical powers, etc. Recipient captivated.	Index source of power over recipient. Recipient as 'spectator' submits to index.	Prototype has power over the recipient. Image of prototype used to control actions of recipient. Idolatry.

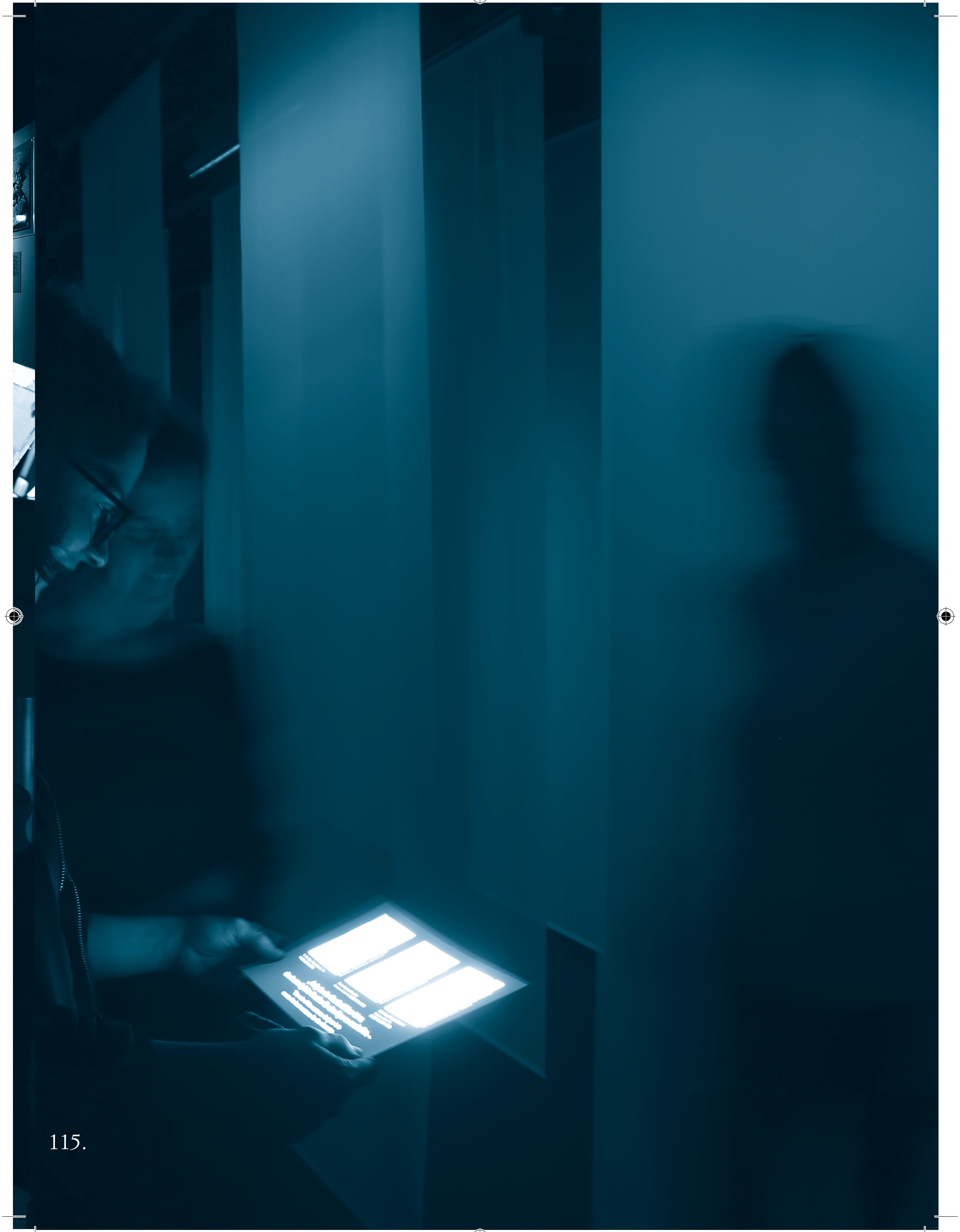
111.

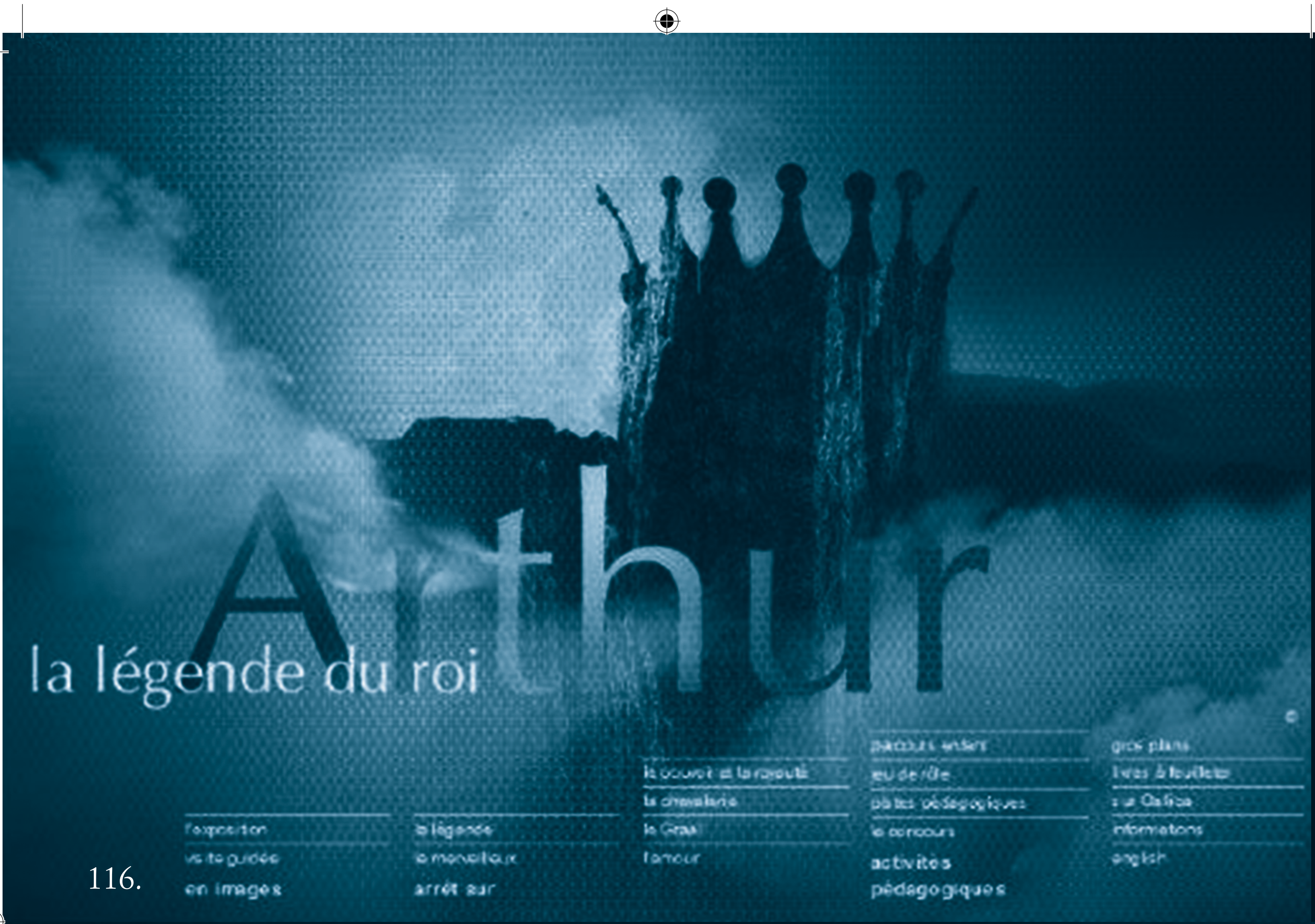
EDDIE CONSTANTINE
ALPHAVILLE
UNE ÉTRANGE AVENTURE DE LEMMY CAUTION
JEAN-LUC GODARD

112.

113.

114.





Arthur
la légende du roi
l'exposition
visite guidée
en images
la légende
le merveilleux
arrêt sur
le pouvoir et la royauté
la chevalerie
le Graal
l'amour
parcours enfant
jeu de rôle
pistes pédagogiques
le concours
activités pédagogiques
gros plans
livres à feuilleter
sur Gallica
informations
english

116.

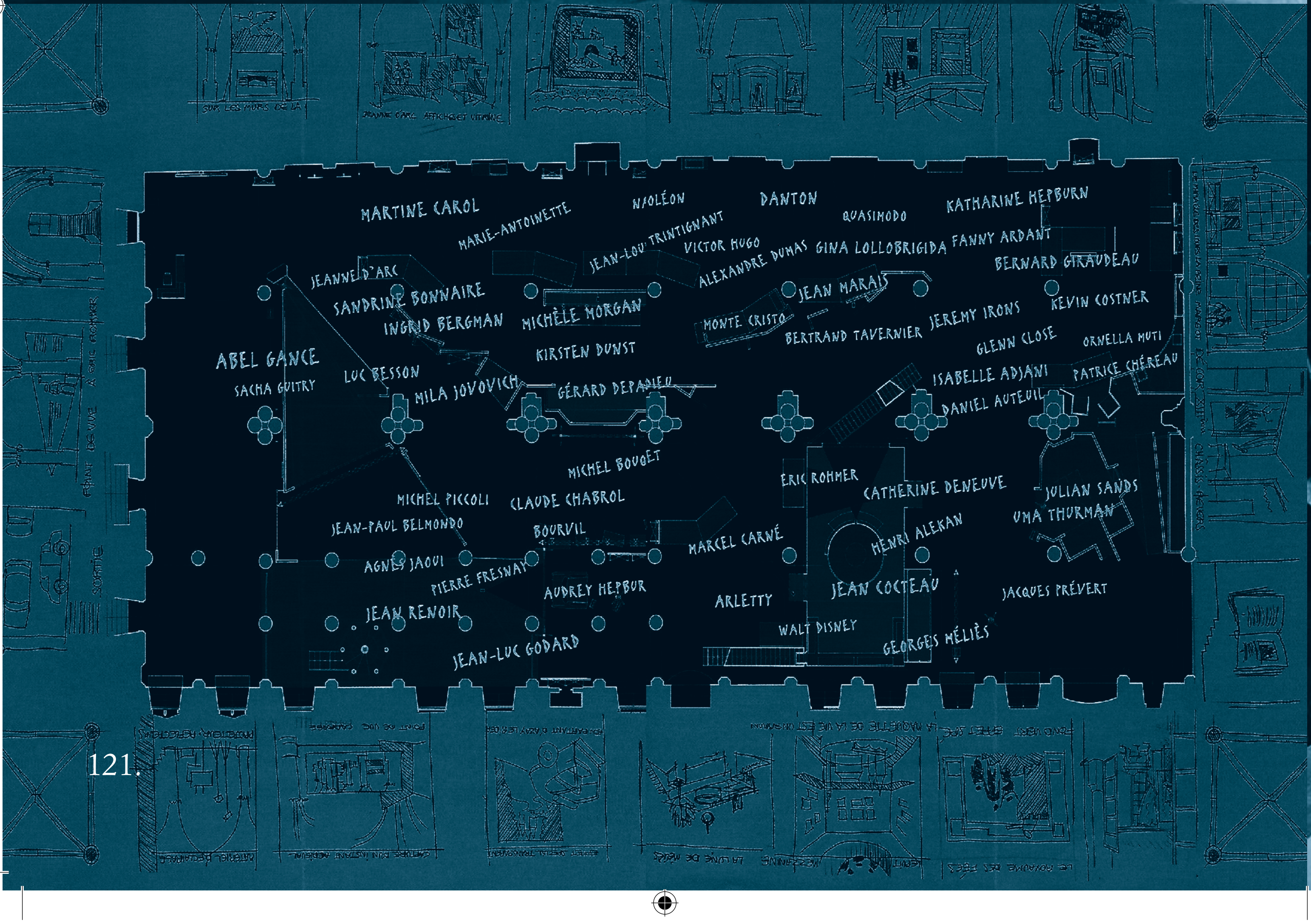
117.

MONUMENTS STARS DU 7E ART

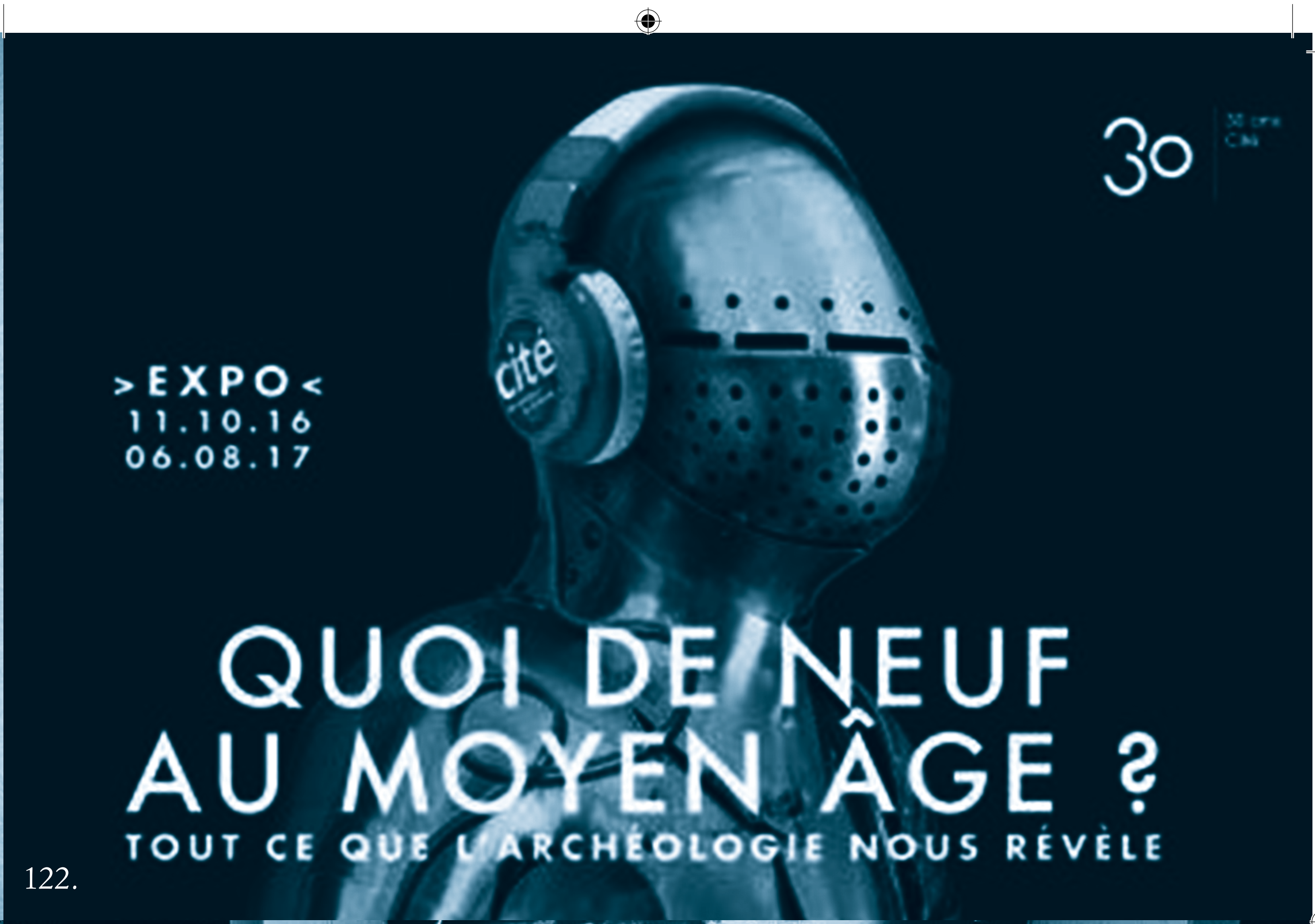
118.

119.

120.

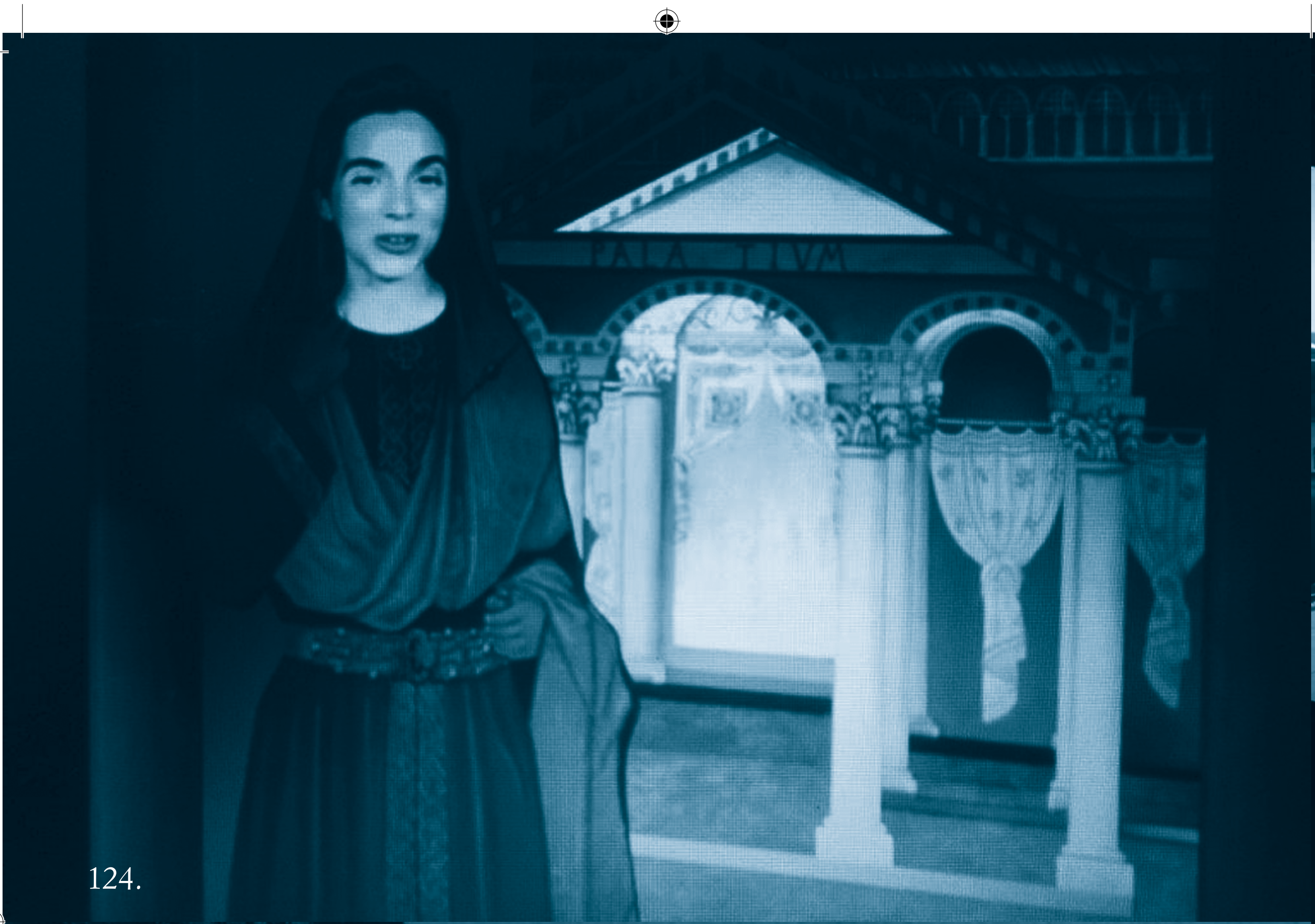

SUR LES MURS DE LA
JEANNE D'ARC AFFICHES ET VITRINE
MARTINE CAROL
MARIE-ANTOINETTE
NAPOLÉON
DANTON
QUASIMODO
KATHARINE HEPBURN
JEAN-LOU TRINTIGNANT
VICTOR HUGO
ALEXANDRE DUMAS
GINA LOLLOBRIGIDA
FANNY ARDANT
BERNARD GIRAUDEAU
JEANNE D'ARC
SANDRINE BONNAIRE
INGRID BERGMAN
MICHÈLE MORGAN
JEAN MARAIS
MONTE CRISTO
BERTRAND TAVERNIER
JEREMY IRONS
KEVIN COSTNER
GLENN CLOSE
ORNELLA MUTI
ABEL GANCE
SACHA GUITRY
LUC BESSON
MILA JOVOVICH
KIRSTEN DUNST
GÉRARD DEPARDIEU
ISABELLE ADJANI
PATRICE CHÉREAU
DANIEL AUTEUIL
MICHEL BOUQET
ERIC ROHMER
CATHERINE DENEUVE
JULIAN SANDS
UMA THURMAN
MICHEL PICCOLI
CLAUDE CHABROL
JEAN-PAUL BELMONDO
BOURVIL
MARCEL CARNÉ
HENRI ALEKAN
AGNÈS JAOUI
PIERRE FRESNAY
AUDREY HEPBURN
ARLETTY
JEAN COCTEAU
JACQUES PRÉVERT
JEAN RENOIR
WALT DISNEY
GEORGES MÉLIÈS
JEAN-LUC GODARD
CHÂSSIS-DÉCORS

121.

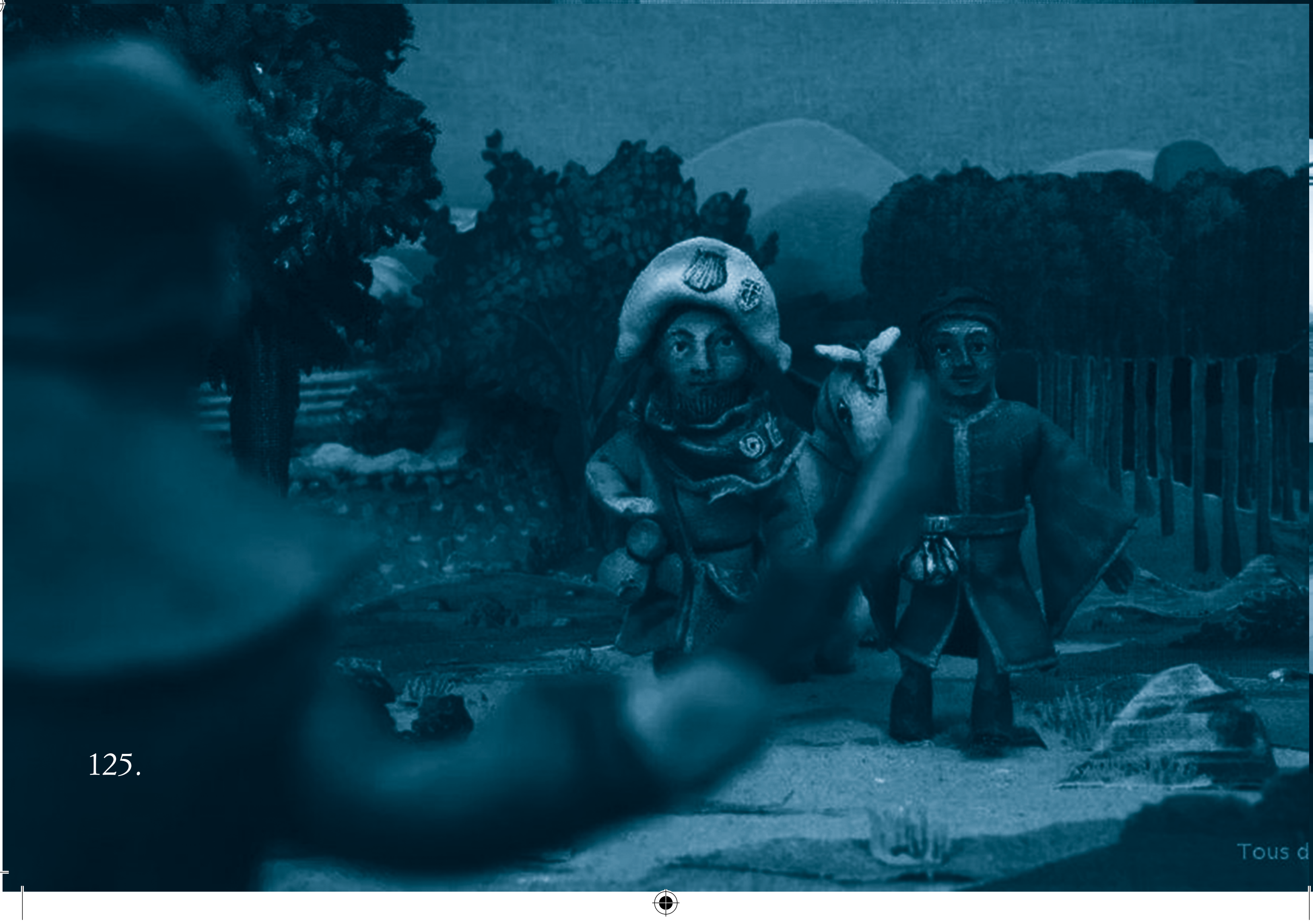

30
>EXPO<
11.10.16
06.08.17
cité
QUOI DE NEUF AU MOYEN ÂGE ?
TOUT CE QUE L'ARCHÉOLOGIE NOUS RÉVÈLE

122.

123.



124.

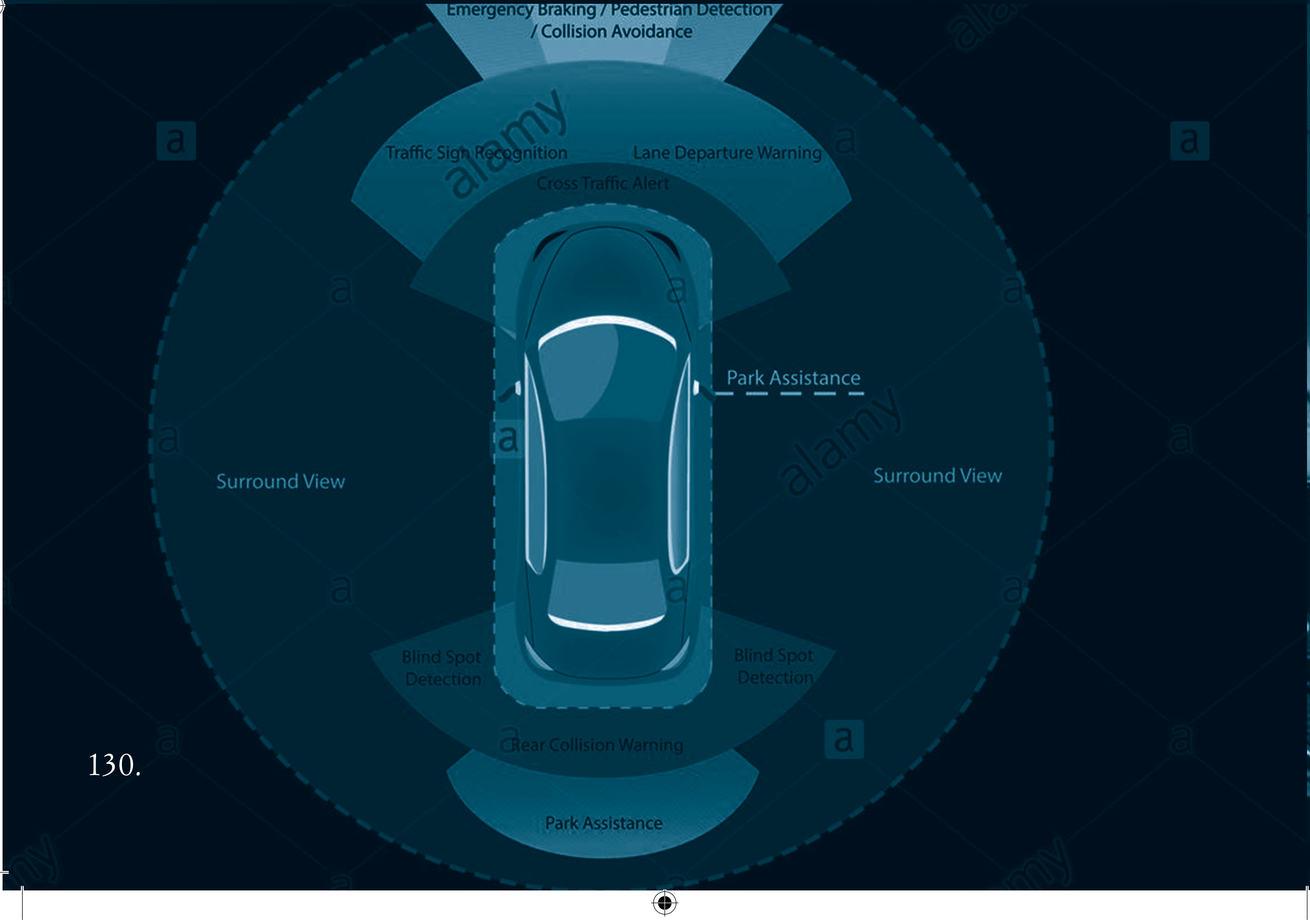


125.

127.

128.

129.


Emergency Braking / Pedestrian Detection / Collision Avoidance
Traffic Sign Recognition
Lane Departure Warning
Cross Traffic Alert
Park Assistance
Surround View
Surround View
Blind Spot Detection
Blind Spot Detection
Rear Collision Warning
Park Assistance

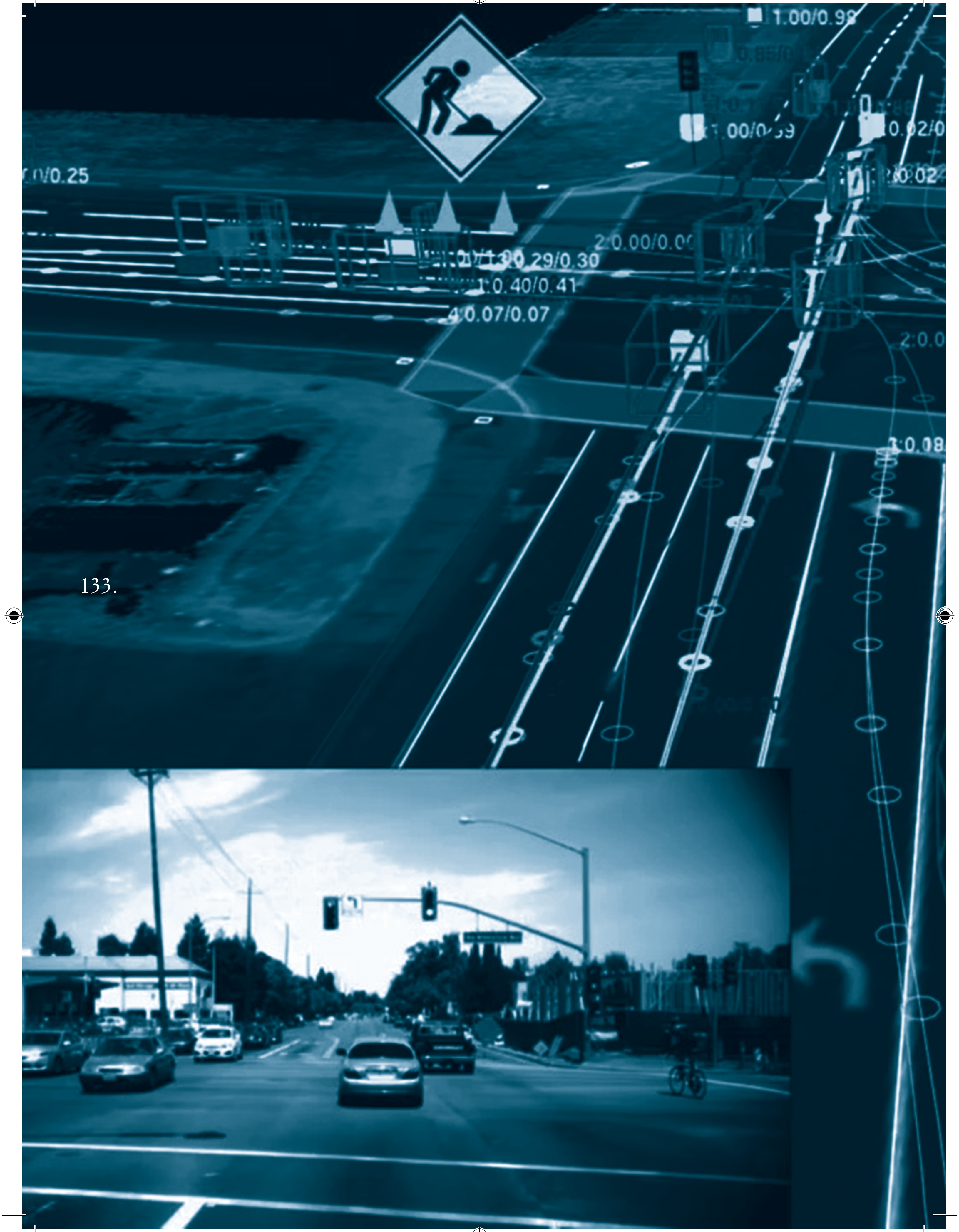
130.

Pitch: -3°
Driver Attentive
Eye openness: 95%
Blinks per minute: 16
Gaze vector: 10°, 3°
Roll: 3°
Yaw: 10°

131.

ercedes-Benz

132.

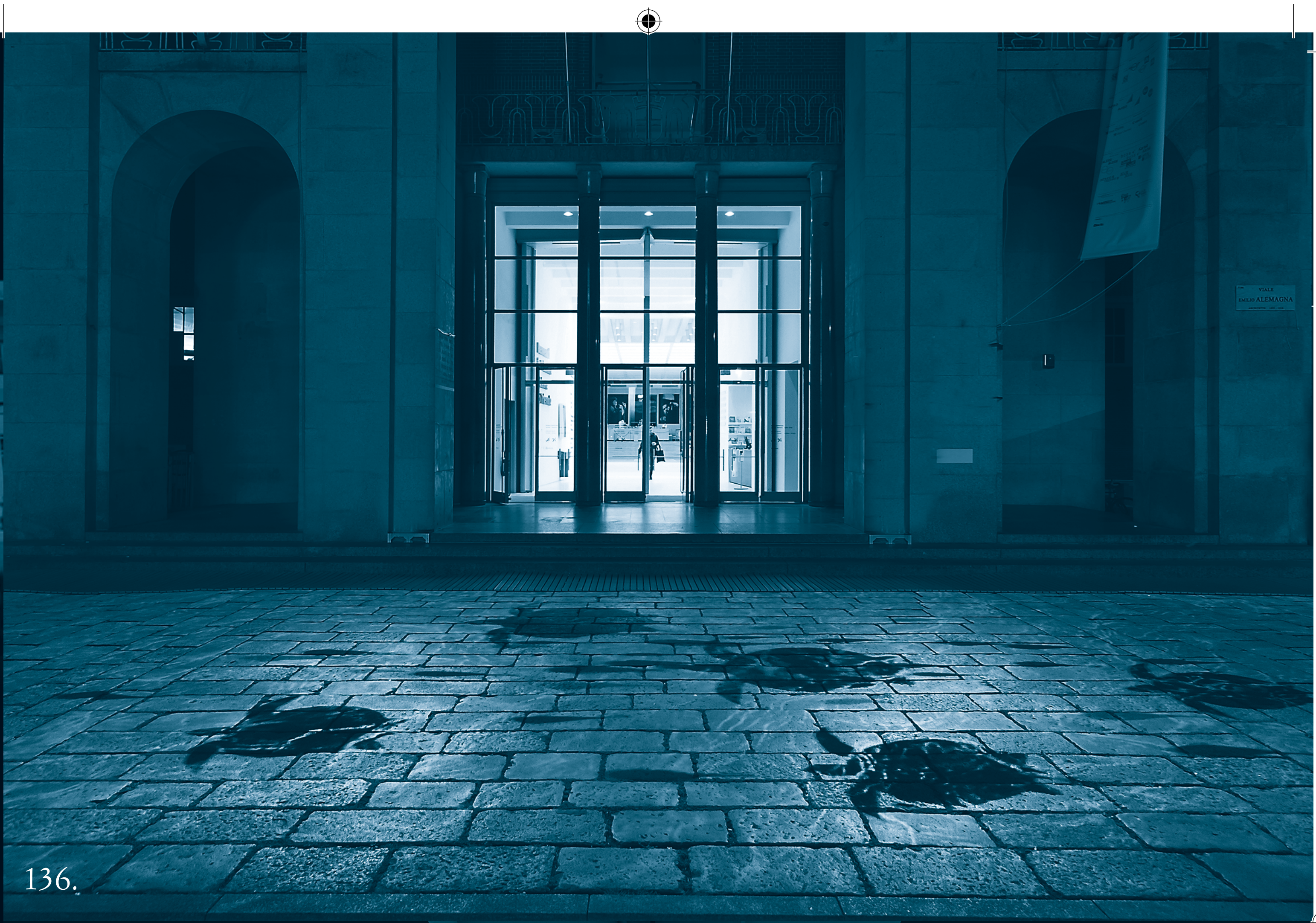

1.00/0.98
.00/0.99
0.02/0
0/0.25
0.02
2:0.00/0.0
0.29/0.30
1:0.40/0.41
4:0.07/0.07
2:0.0
1:0.08

133.

0.15/0.95
02/0.02
.01/0.01
2:0.00/0.00
2:0.01/0.00
0.08/0.09
4:0.88/0.91
2:0.00/0.00
0.73/0.75
0.08/0.22
0.82/0.00
0.19/0.23
0.0/0.02
1:0.01/0.01
0.02/0.02
0.27/0.31

134.

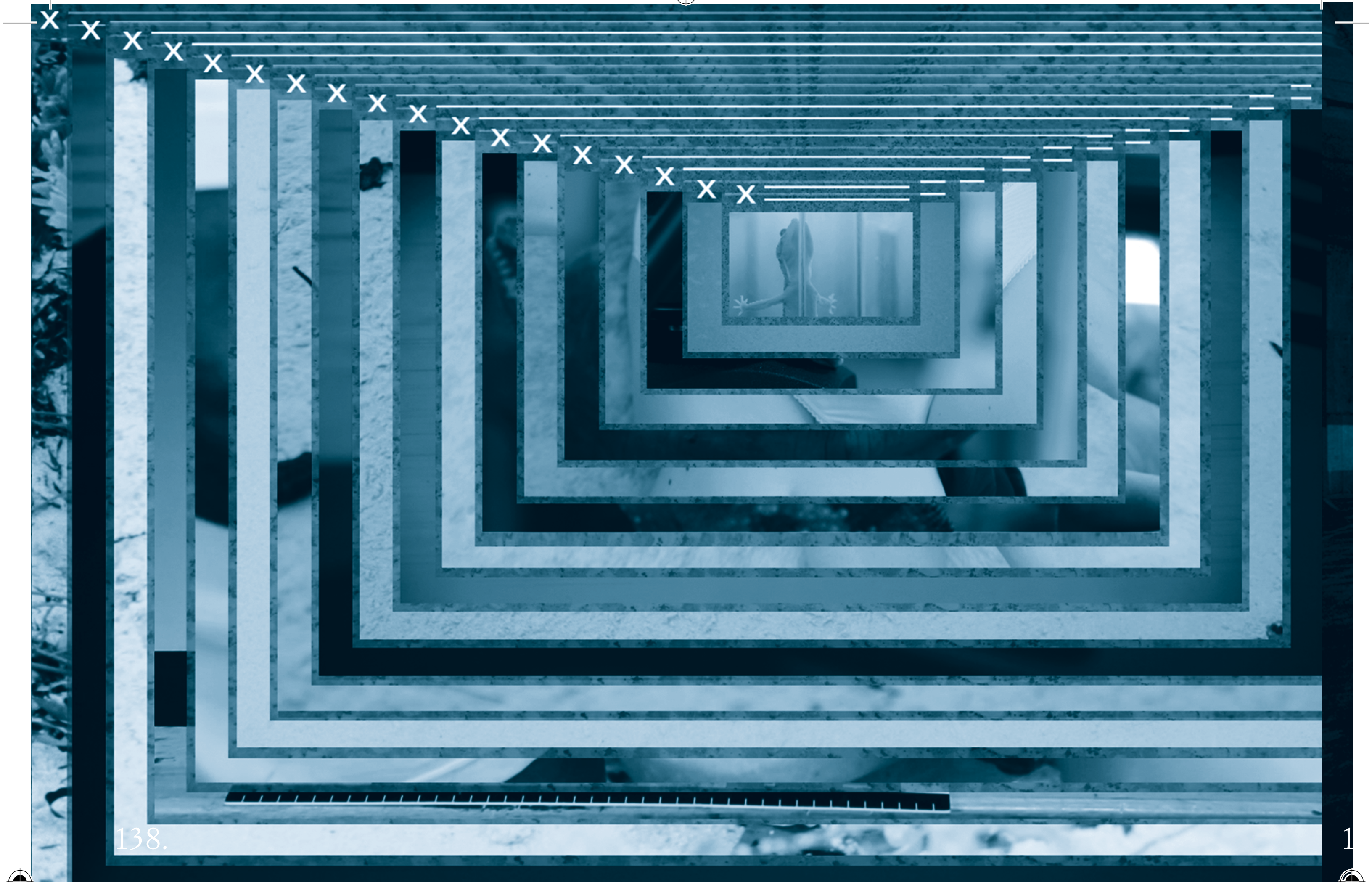
135.


VIALE EMILIO ALEMAGNA

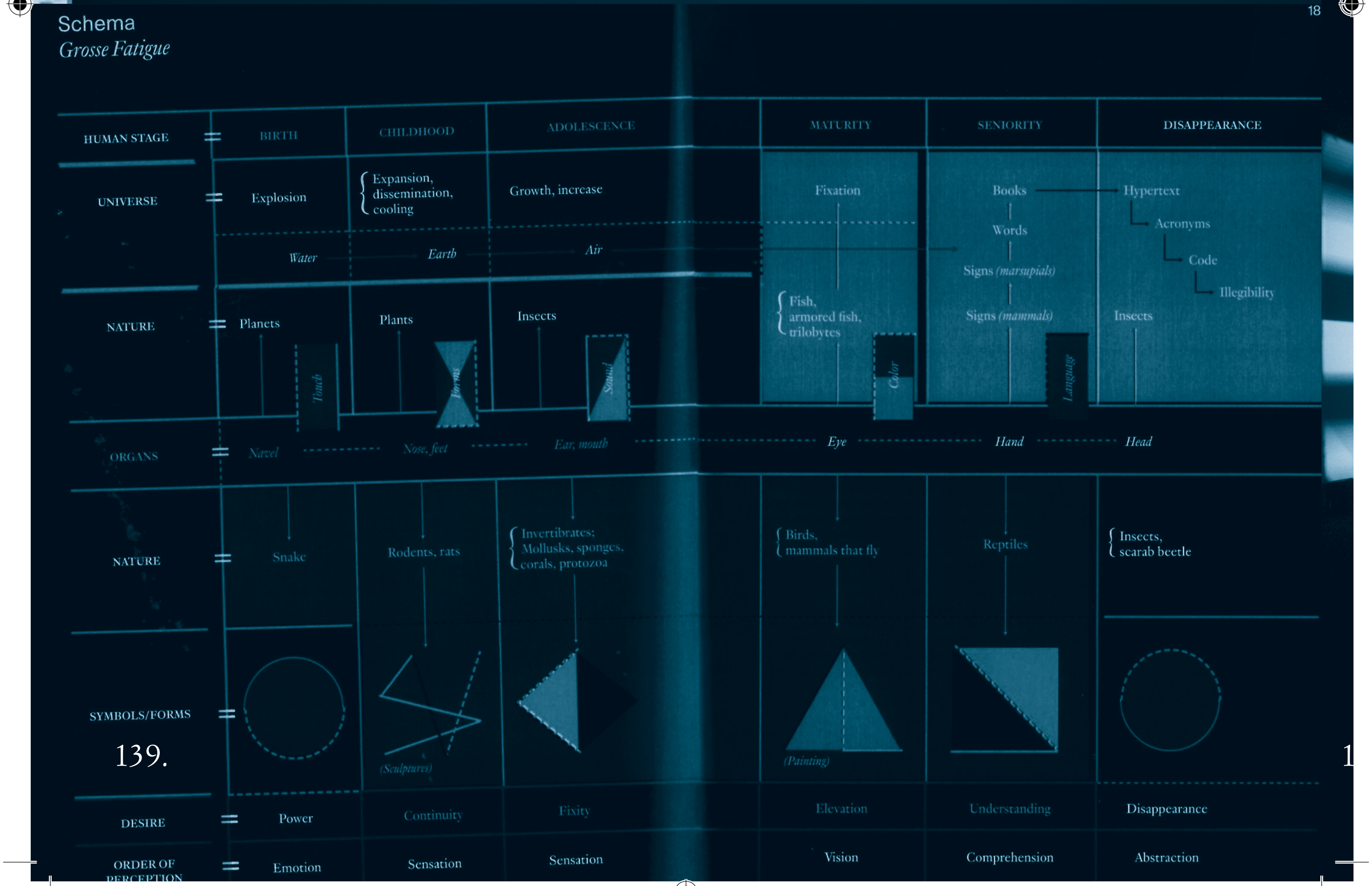
136.

NLORENZO
IL MARE A MILANO.

137.



138.



Schema

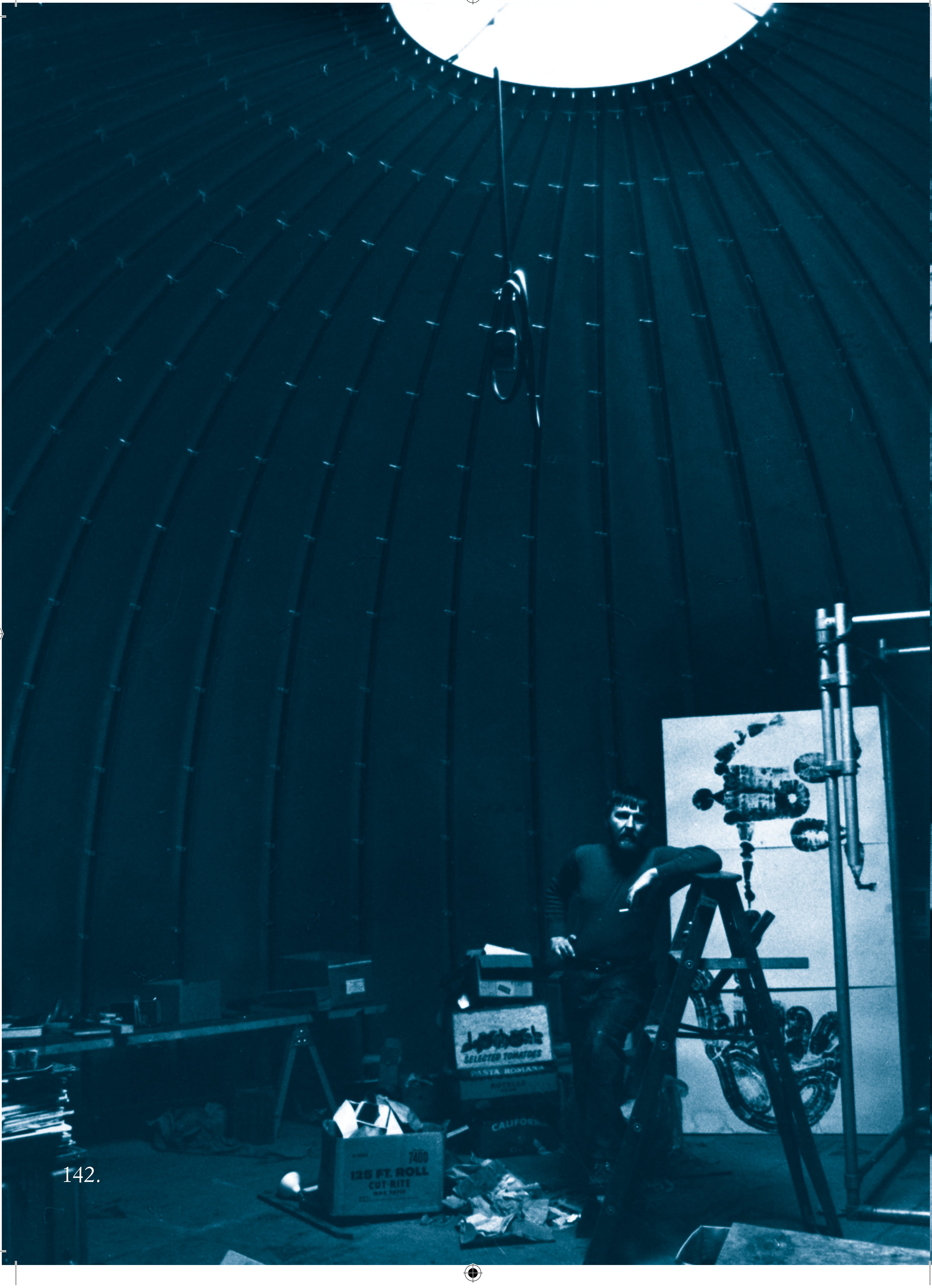
Grosse Fatigue

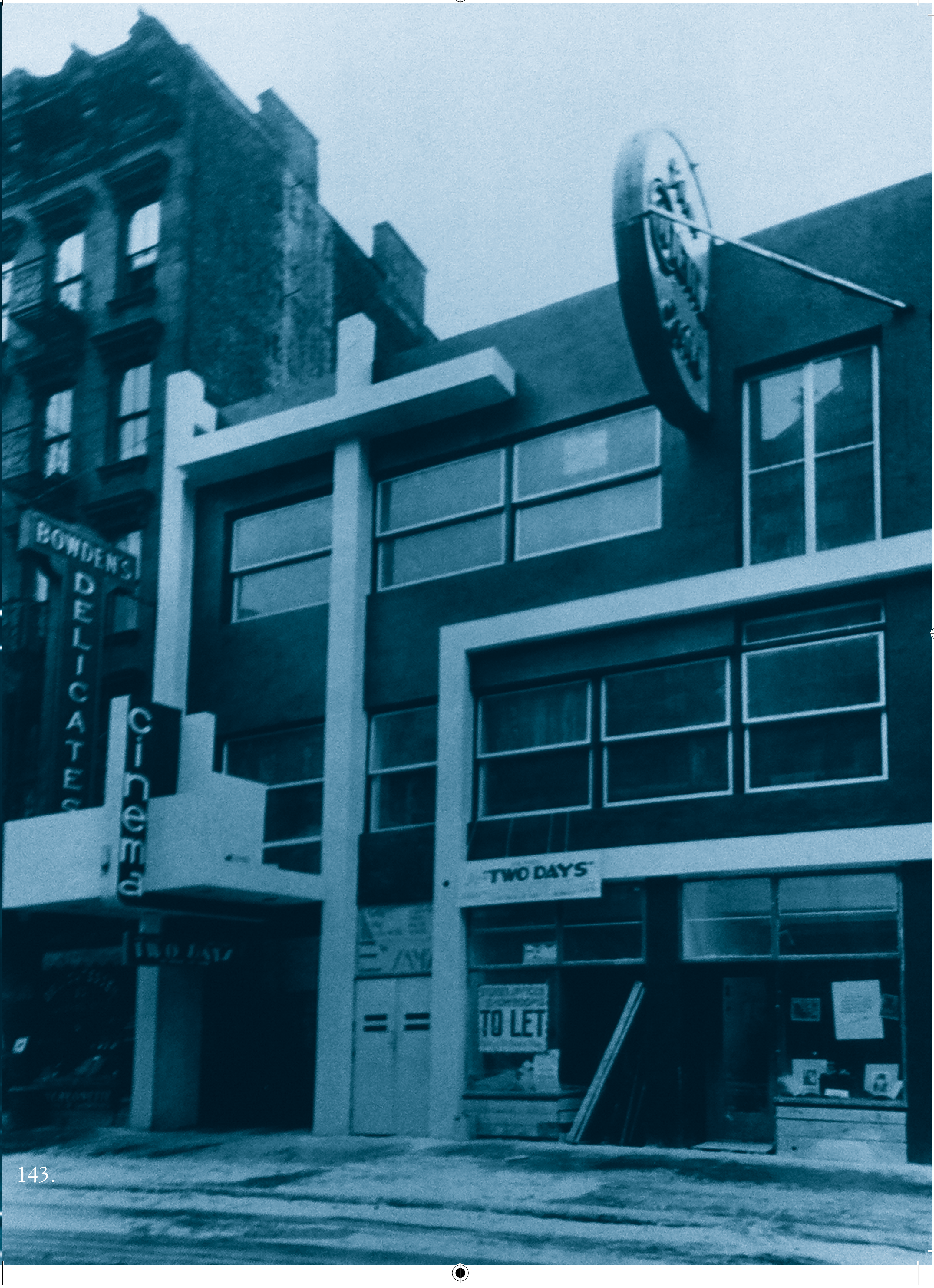
HUMAN STAGE	=	BIRTH	CHILDHOOD	ADOLESCENCE	MATURITY	SENIORITY	DISAPPEARANCE
UNIVERSE	=	Explosion	Expansion, dissemination, cooling	Growth, increase	Fixation	Books Words Signs *(marsupials)*	Hypertext Acronyms Code Illegibility
		Water	*Earth*	*Air*			
NATURE	=	Planets	Plants	Insects	Fish, armored fish, trilobytes	Signs *(mammals)*	Insects
		Touch	*Forms*	*Sound*	*Color*	*Language*	
ORGANS	=	*Navel*	*Nose, feet*	*Ear, mouth*	*Eye*	*Hand*	*Head*
NATURE	=	Snake	Rodents, rats	Invertibrates; Mollusks, sponges, corals, protozoa	Birds, mammals that fly	Reptiles	Insects, scarab beetle
SYMBOLS/FORMS	=		*(Sculptures)*		*(Painting)*		
DESIRE	=	Power	Continuity	Fixity	Elevation	Understanding	Disappearance
ORDER OF PERCEPTION	=	Emotion	Sensation	Sensation	Vision	Comprehension	Abstraction

139.

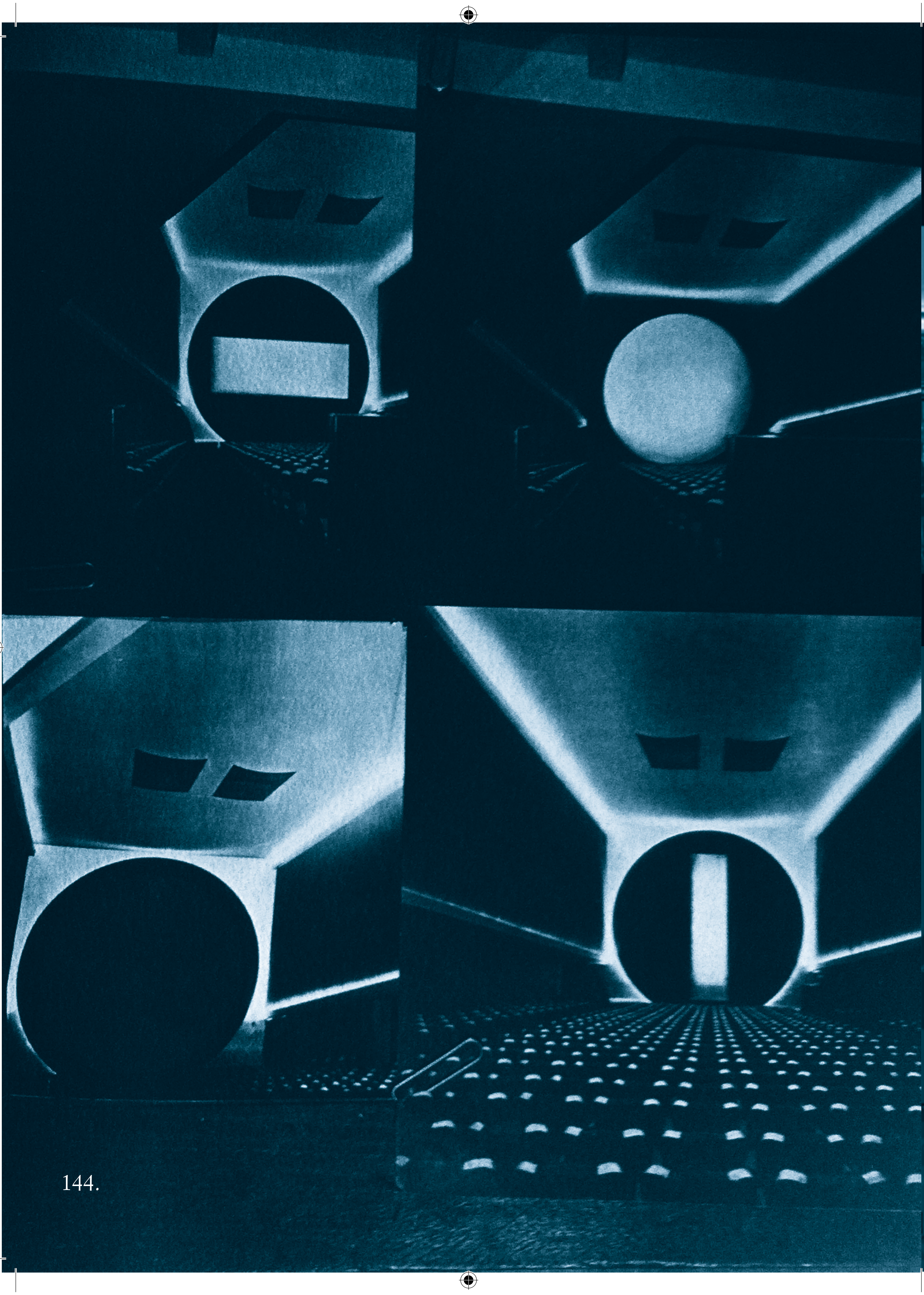
140.

141.


SELECTED TOMATOES
PASTA ROMANA
CALIFORN
7400
125 FT. ROLL
CUT-RITE


BOWDEN'S
DELICATES
cinema
"TWO DAYS"
TWO DAYS
TO LET

143.



Around the Louvre
Map | 2nd floor
15:29
Richelieu
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38
39
Holland, second half of the 17th ce
Menu
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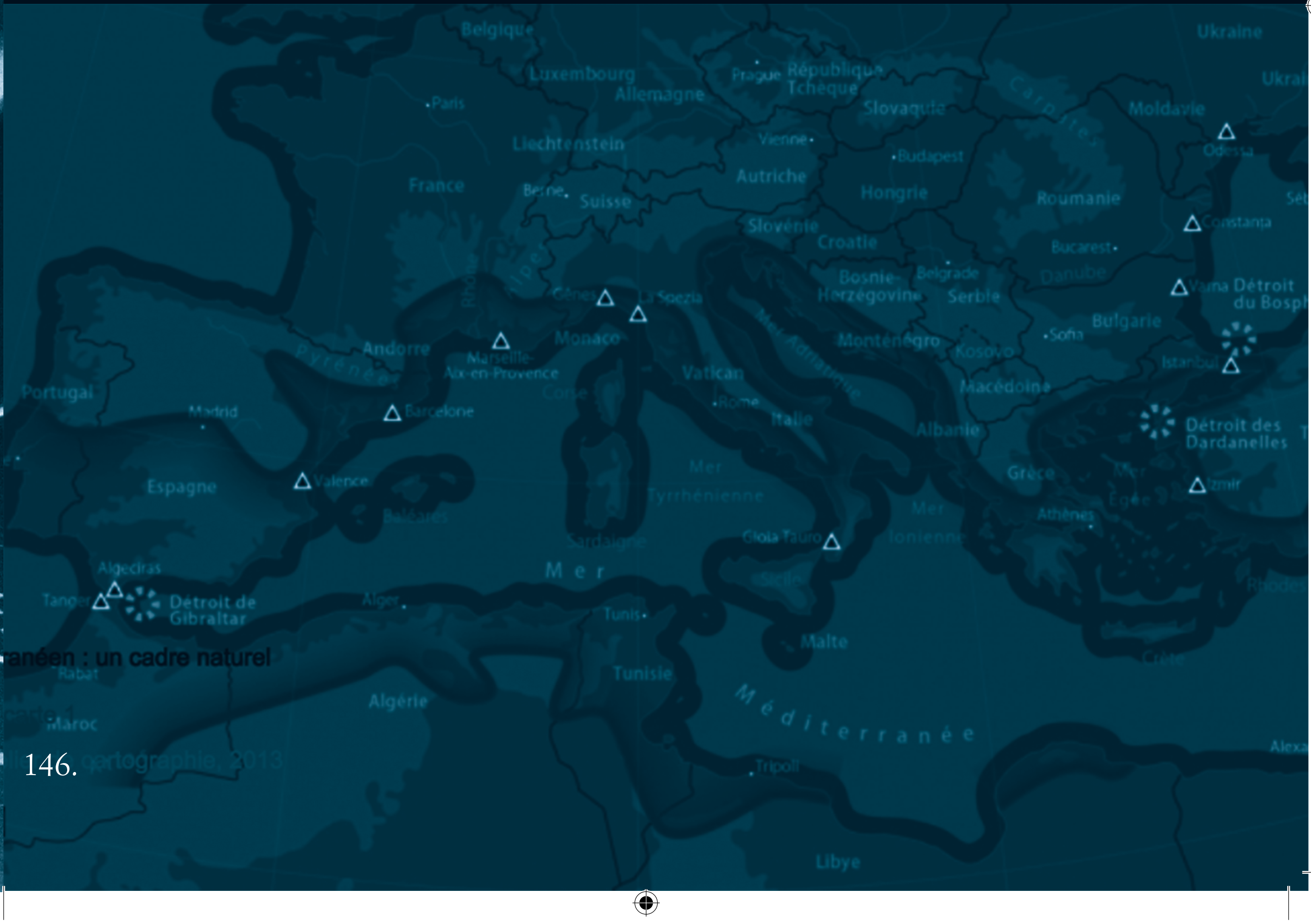
145.


Belgique
Luxembourg
Allemagne
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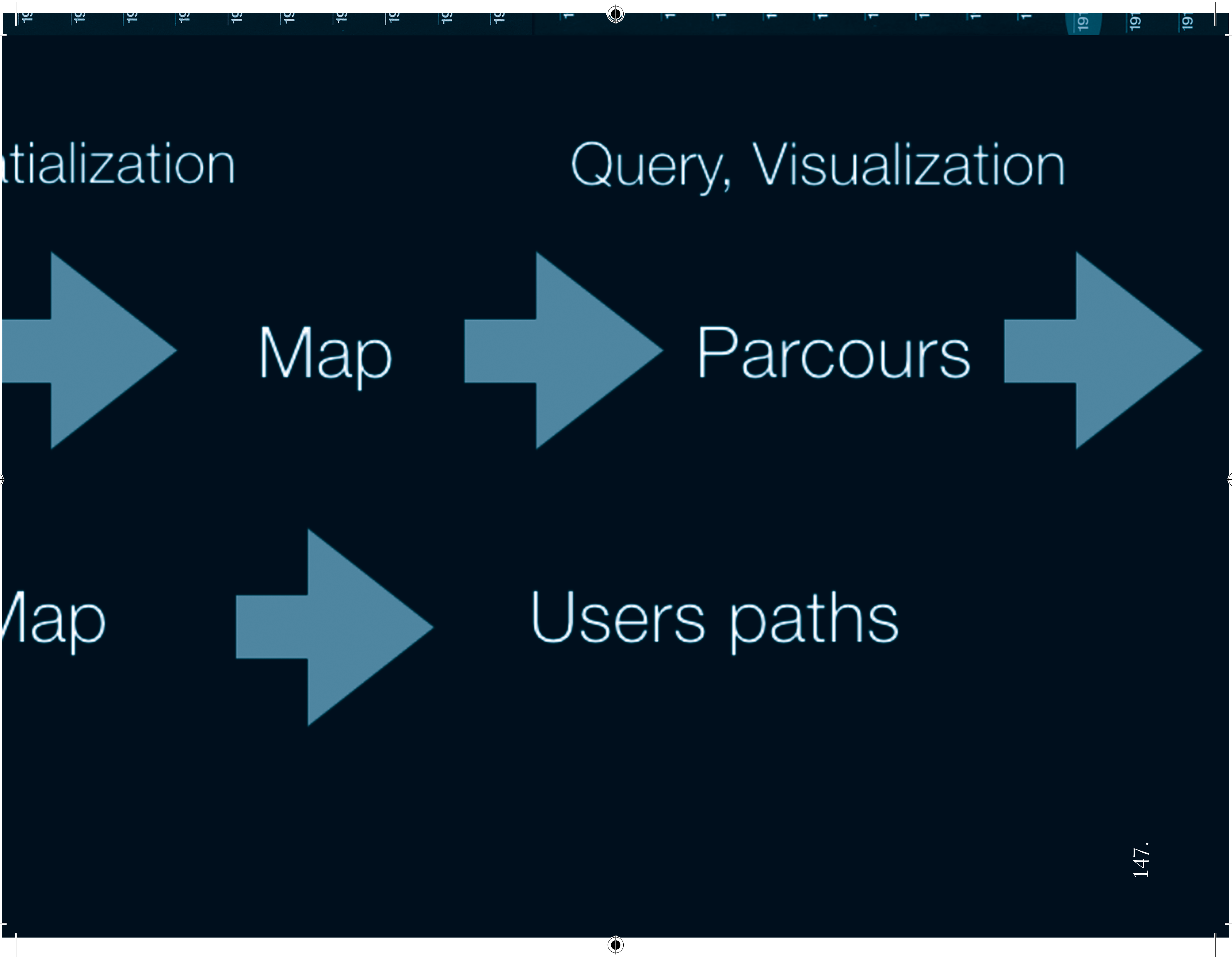
République Tchèque
Ukraine
Paris
Slovaquie
Moldavie
Odessa
Liechtenstein
Vienne
Budapest
France
Berne
Suisse
Autriche
Hongrie
Roumanie
Slovénie
Croatie
Constanta
Bucarest
Bosnie-Herzégovine
Belgrade
Serbie
Danube
Varna
Détroit du Bosphore
Gênes
La Spezia
Monaco
Monténégro
Kosovo
Bulgarie
Sofia
Andorre
Marseille-Aix-en-Provence
Vatican
Istanbul
Portugal
Madrid
Barcelone
Corse
Rome
Macédoine
Italie
Albanie
Détroit des Dardanelles
Espagne
Valence
Mer Tyrrhénienne
Grèce
Izmir
Baléares
Sardaigne
Gioia Tauro
Mer Ionienne
Athènes
Algeciras
Tanger
Détroit de Gibraltar
Alger
Tunis
Mer Méditerranée
Malte
Rabat
Tunisie
Algérie
Maroc
Tripoli
Libye
anéen : un cadre naturel
cartographie, 2013

146.



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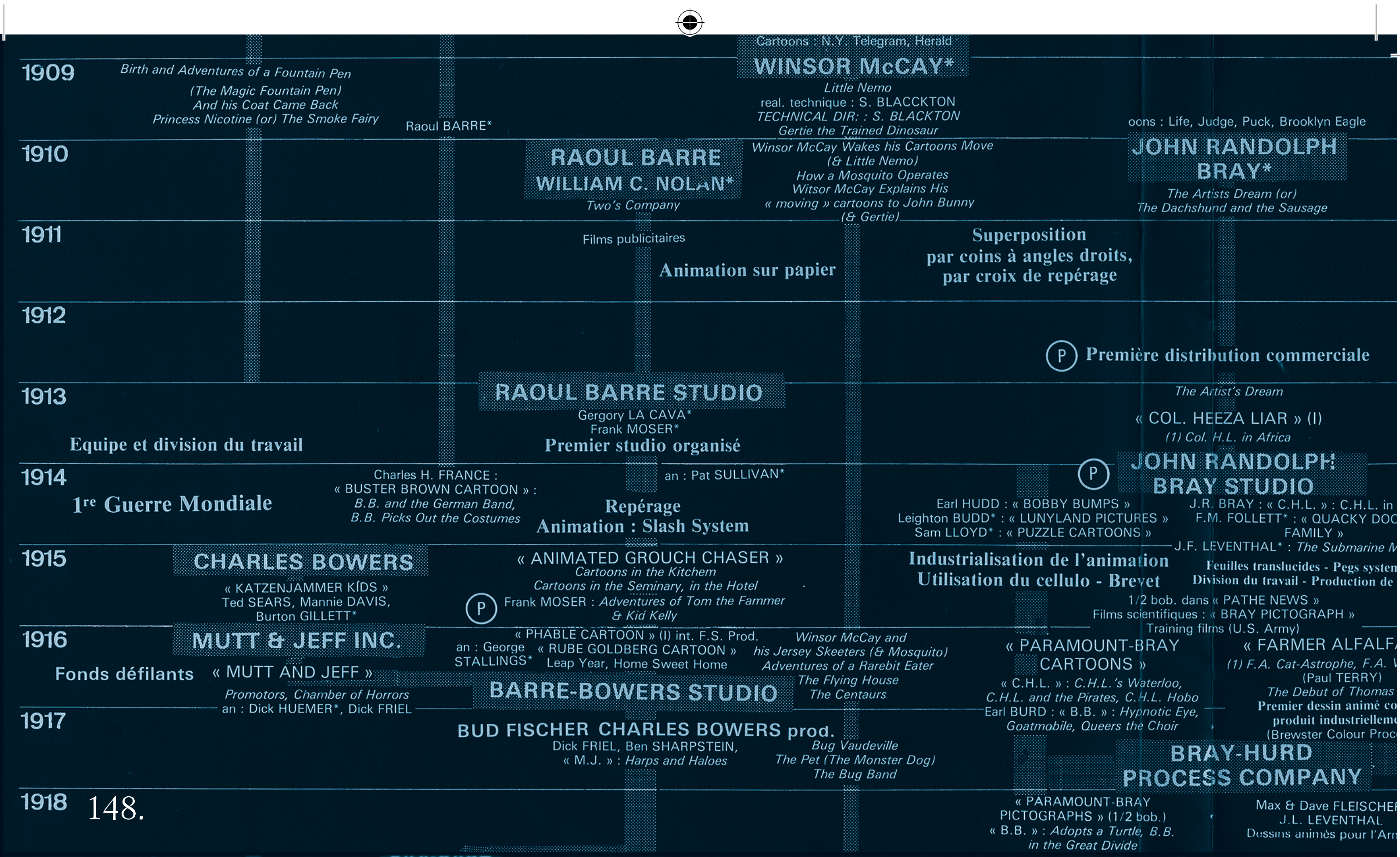
Query, Visualization

Map

Parcours

Map

Users paths



1909
Birth and Adventures of a Fountain Pen
(The Magic Fountain Pen)
And his Coat Came Back
Princess Nicotine (or) The Smoke Fairy
Raoul BARRE*

Cartoons : N.Y. Telegram, Herald
WINSOR McCAY*
Little Nemo
real. technique : S. BLACKTON
TECHNICAL DIR. : S. BLACKTON
Gertie the Trained Dinosaur
Winsor McCay Wakes his Cartoons Move
(& Little Nemo)
How a Mosquito Operates
Witsor McCay Explains His
« moving » cartoons to John Bunny
(& Gertie)

oons : Life, Judge, Puck, Brooklyn Eagle
JOHN RANDOLPH BRAY*
The Artists Dream (or)
The Dachshund and the Sausage

1910
RAOUL BARRE
WILLIAM C. NOLAN*
Two's Company

1911
Films publicitaires
Animation sur papier
Superposition par coins à angles droits, par croix de repérage

1912
Ⓟ **Première distribution commerciale**

1913
RAOUL BARRE STUDIO
Gergory LA CAVA*
Frank MOSER*
Premier studio organisé
Equipe et division du travail
The Artist's Dream
« COL. HEEZA LIAR » (I)
(I) Col. H.L. in Africa

1914
1re Guerre Mondiale
Charles H. FRANCE :
« BUSTER BROWN CARTOON » :
B.B. and the German Band,
B.B. Picks Out the Costumes
an : Pat SULLIVAN*
Repérage
Animation : Slash System
Ⓟ **JOHN RANDOLPH BRAY STUDIO**
Earl HUDD : « BOBBY BUMPS »
Leighton BUDD* : « LUNYLAND PICTURES »
Sam LLOYD* : « PUZZLE CARTOONS »
J.R. BRAY : « C.H.L. » : C.H.L. in
F.M. FOLLETT* : « QUACKY DOC
FAMILY »
J.F. LEVENTHAL* : *The Submarine M*

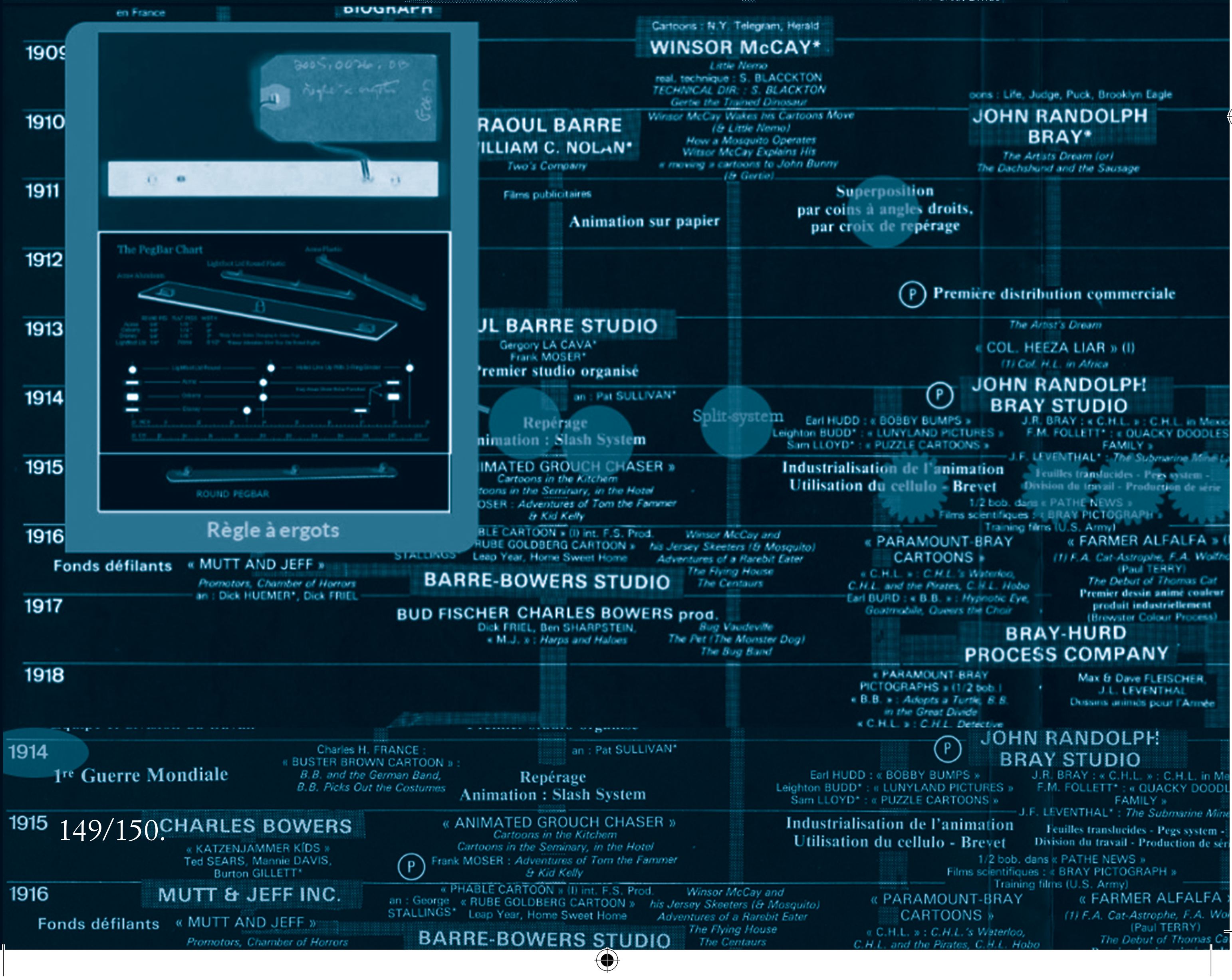
1915
CHARLES BOWERS
« KATZENJAMMER KIDS »
Ted SEARS, Mannie DAVIS,
Burton GILLETT*
« ANIMATED GROUCH CHASER »
Cartoons in the Kitchen
Cartoons in the Seminary, in the Hotel
Ⓟ Frank MOSER : *Adventures of Tom the Fammer*
& Kid Kelly
Industrialisation de l'animation
Utilisation du cellulo - Brevet
Feuilles translucides - Pegs system
Division du travail - Production de
1/2 bob. dans « PATHE NEWS »
Films scientifiques : « BRAY PICTOGRAPH »
Training films (U.S. Army)

1916
MUTT & JEFF INC.
Fonds défilants
« MUTT AND JEFF »
Promotors, Chamber of Horrors
an : Dick HUEMER*, Dick FRIEL
« PHABLE CARTOON » (I) int. F.S. Prod.
an : George STALLINGS*
« RUBE GOLDBERG CARTOON »
Leap Year, Home Sweet Home
Winsor McCay and
his Jersey Skeeters (& Mosquito)
Adventures of a Rarebit Eater
The Flying House
The Centaurs
BARRE-BOWERS STUDIO
« PARAMOUNT-BRAY CARTOONS »
« C.H.L. » : *C.H.L.'s Waterloo,*
C.H.L. and the Pirates, C.H.L. Hobo
Earl BURD : « B.B. » : *Hypnotic Eye,*
Goatmobile, Queers the Choir
« FARMER ALFALFA
(I) F.A. Cat-Astrophe, F.A. W
(Paul TERRY)
The Debut of Thomas
Premier dessin animé co
produit industriellem
(Brewster Colour Proc

1917
BUD FISCHER CHARLES BOWERS prod.
Dick FRIEL, Ben SHARPSTEIN,
« M.J. » : *Harps and Haloes*
Bug Vaudeville
The Pet (The Monster Dog)
The Bug Band
BRAY-HURD PROCESS COMPANY

1918
« PARAMOUNT-BRAY PICTOGRAPHS » (1/2 bob.)
« B.B. » : *Adopts a Turtle, B.B. in the Great Divide*
Max & Dave FLEISCHER
J.L. LEVENTHAL
Dessins animés pour l'Arm

148.



Règle à ergots

1909 Cartoons : N.Y. Telegram, Herald
WINSOR McCAY* Little Nemo real. technique : S. BLACKTON TECHNICAL DIR. : S. BLACKTON Gertie the Trained Dinosaur Winsor McCay Wakes his Cartoons Move (& Little Nemo) How a Mosquito Operates Witsor McCay Explains His « moving » cartoons to John Bunny (& Gertie)
oons : Life, Judge, Puck, Brooklyn Eagle JOHN RANDOLPH BRAY* The Artists Dream (or) The Dachshund and the Sausage
1910 RAOUL BARRE WILLIAM C. NOLAN* Two's Company
1911 Films publicitaires Animation sur papier Superposition par coins à angles droits, par croix de repérage
1912 Ⓟ Première distribution commerciale
1913 UL BARRE STUDIO Gergory LA CAVA* Frank MOSER* Premier studio organisé The Artist's Dream « COL. HEEZA LIAR » (I) (I) Col. H.L. in Africa
1914 an : Pat SULLIVAN* Repérage Animation : Slash System Ⓟ JOHN RANDOLPH BRAY STUDIO Earl HUDD : « BOBBY BUMPS » Leighton BUDD* : « LUNYLAND PICTURES » Sam LLOYD* : « PUZZLE CARTOONS » J.R. BRAY : « C.H.L. » : C.H.L. in Mexico F.M. FOLLETT* : « QUACKY DOODLES FAMILY » J.F. LEVENTHAL* : The Submarine Mine L
1915 IMATED GROUCH CHASER » Cartoons in the Kitchen Cartoons in the Seminary, in the Hotel OSER : Adventures of Tom the Fammer & Kid Kelly Industrialisation de l'animation Utilisation du cellulo - Brevet Feuilles translucides - Pegs system - Division du travail - Production de série 1/2 bob. dans « PATHE NEWS » Films scientifiques : « BRAY PICTOGRAPH » Training films (U.S. Army)
1916 BLE CARTOON » (I) int. F.S. Prod. STALLINGS* RUBE GOLDBERG CARTOON » Leap Year, Home Sweet Home Winsor McCay and his Jersey Skeeters (& Mosquito) Adventures of a Rarebit Eater The Flying House The Centaurs Fonds défilants « MUTT AND JEFF » Promotors, Chamber of Horrors an : Dick HUEMER*, Dick FRIEL « PARAMOUNT-BRAY CARTOONS » « C.H.L. » : C.H.L.'s Waterloo, C.H.L. and the Pirates, C.H.L. Hobo Earl BURD : « B.B. » : Hypnotic Eye, Goatmobile, Queers the Choir « FARMER ALFALFA » (I) F.A. Cat-Astrophe, F.A. Wolfhc (Paul TERRY) The Debut of Thomas Cat Premier dessin animé couleur produit industriellement (Brewster Colour Process)
1917 BARRE-BOWERS STUDIO BUD FISCHER CHARLES BOWERS prod. Dick FRIEL, Ben SHARPSTEIN, « M.J. » : Harps and Haloes Bug Vaudeville The Pet (The Monster Dog) The Bug Band BRAY-HURD PROCESS COMPANY
1918 « PARAMOUNT-BRAY PICTOGRAPHS » (1/2 bob.) « B.B. » : Adopts a Turtle, B.B. in the Great Divide Max & Dave FLEISCHER J.L. LEVENTHAL Dessins animés pour l'Armée
1914 1re Guerre Mondiale Charles H. FRANCE : « BUSTER BROWN CARTOON » : B.B. and the German Band, B.B. Picks Out the Costumes an : Pat SULLIVAN* Repérage Animation : Slash System Ⓟ JOHN RANDOLPH BRAY STUDIO Earl HUDD : « BOBBY BUMPS » Leighton BUDD* : « LUNYLAND PICTURES » Sam LLOYD* : « PUZZLE CARTOONS » J.R. BRAY : « C.H.L. » : C.H.L. in Me F.M. FOLLETT* : « QUACKY DOODL FAMILY » J.F. LEVENTHAL* : The Submarine Mine
1915 CHARLES BOWERS « KATZENJAMMER KIDS » Ted SEARS, Mannie DAVIS, Burton GILLETT* « ANIMATED GROUCH CHASER » Cartoons in the Kitchen Cartoons in the Seminary, in the Hotel Ⓟ Frank MOSER : Adventures of Tom the Fammer & Kid Kelly Industrialisation de l'animation Utilisation du cellulo - Brevet Feuilles translucides - Pegs system - Division du travail - Production de séri 1/2 bob. dans « PATHE NEWS » Films scientifiques : « BRAY PICTOGRAPH » Training films (U.S. Army)
1916 MUTT & JEFF INC. Fonds défilants « MUTT AND JEFF » Promotors, Chamber of Horrors « PHABLE CARTOON » (I) int. F.S. Prod. an : George STALLINGS* « RUBE GOLDBERG CARTOON » Leap Year, Home Sweet Home Winsor McCay and his Jersey Skeeters (& Mosquito) Adventures of a Rarebit Eater The Flying House The Centaurs BARRE-BOWERS STUDIO « PARAMOUNT-BRAY CARTOONS » « C.H.L. » : C.H.L.'s Waterloo, C.H.L. and the Pirates, C.H.L. Hobo « FARMER ALFALFA » (I) F.A. Cat-Astrophe, F.A. Wo (Paul TERRY) The Debut of Thomas Ca

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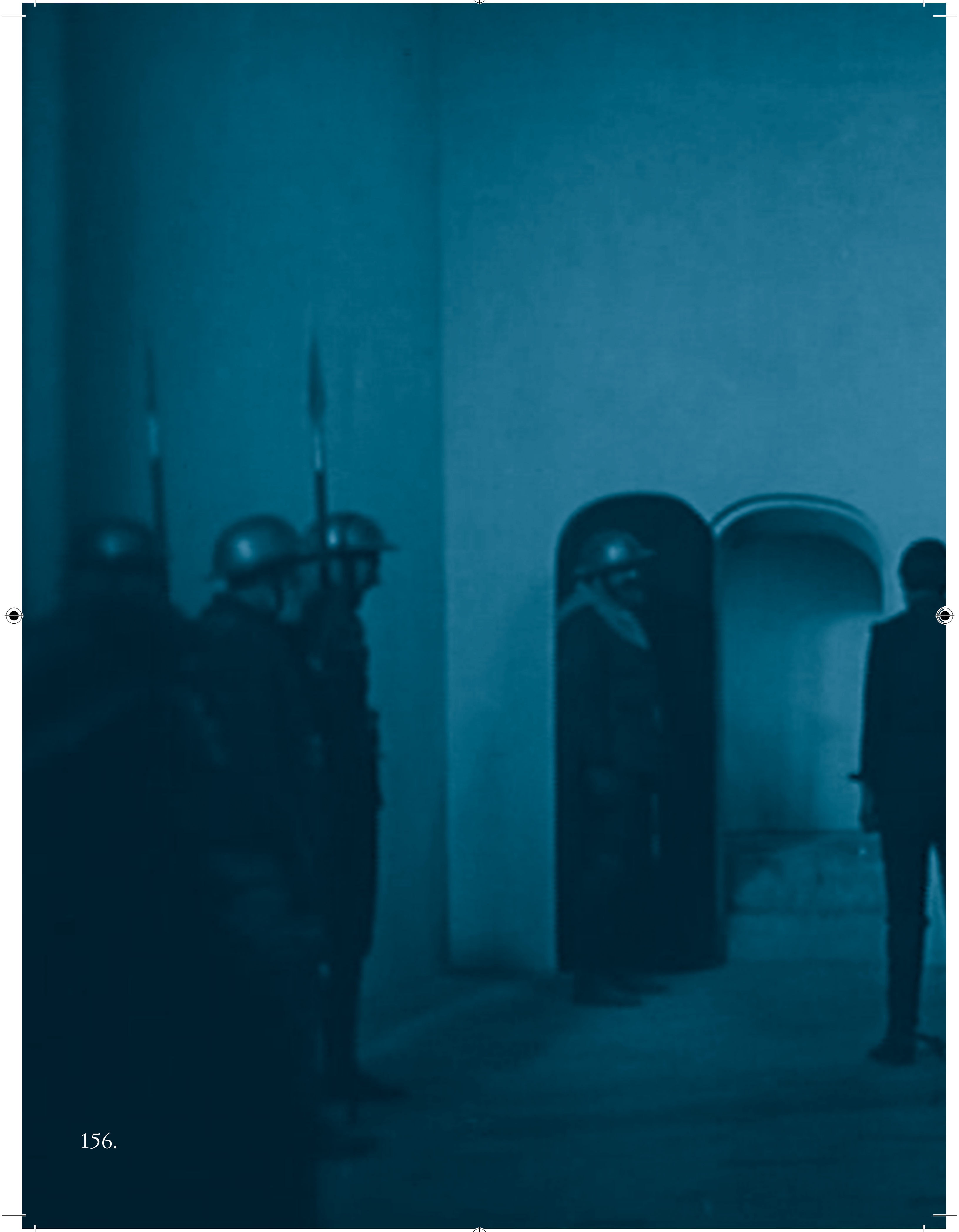
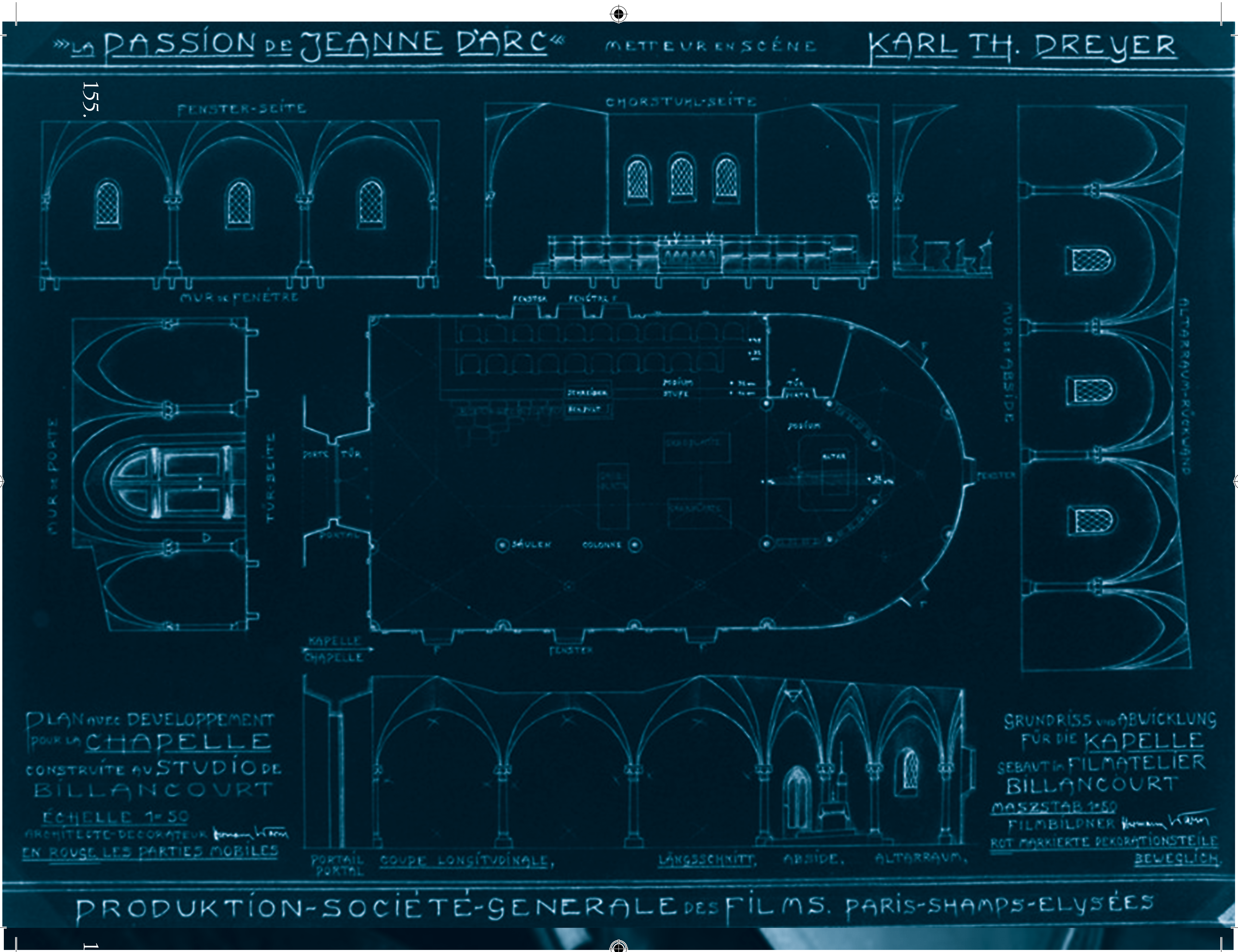
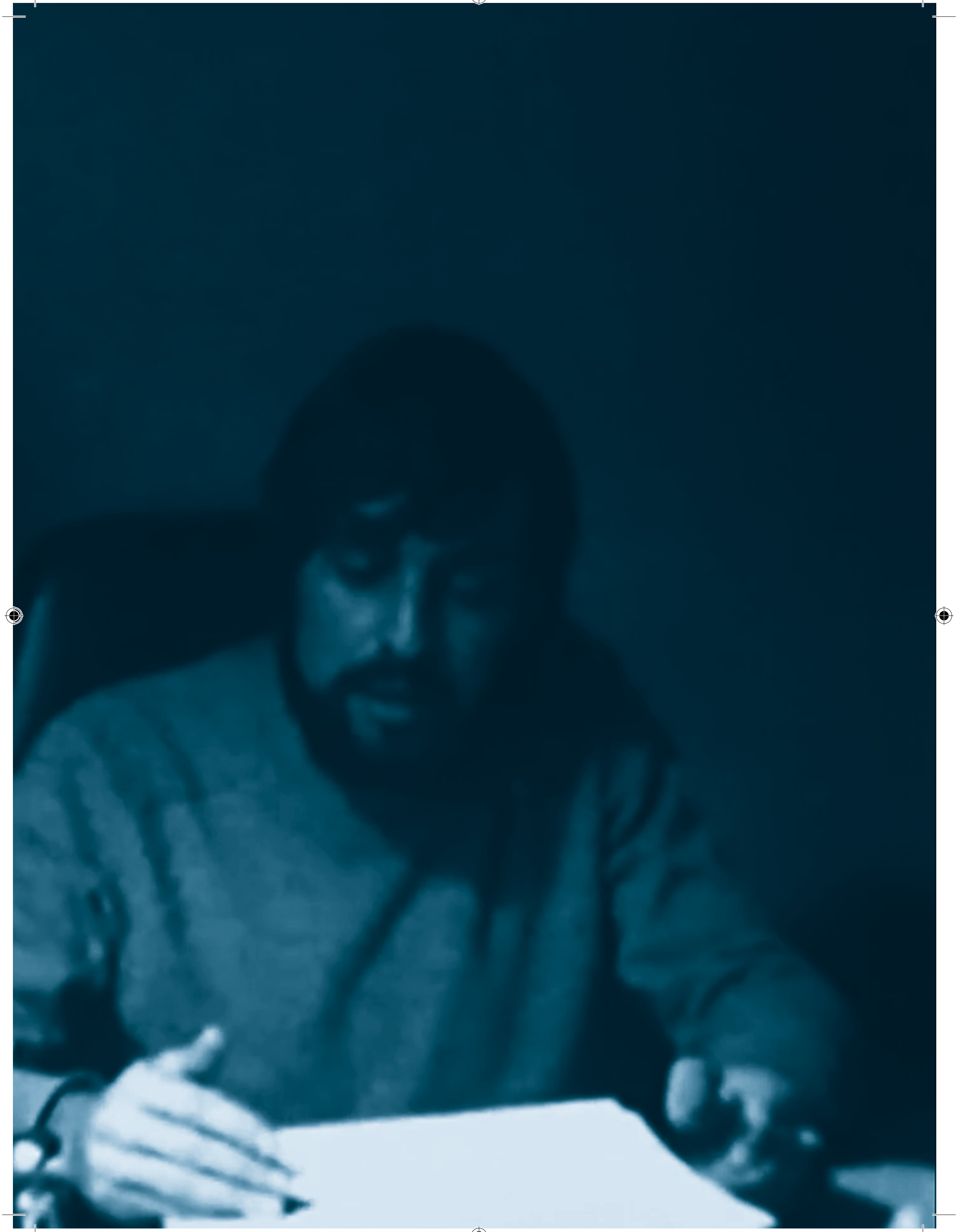
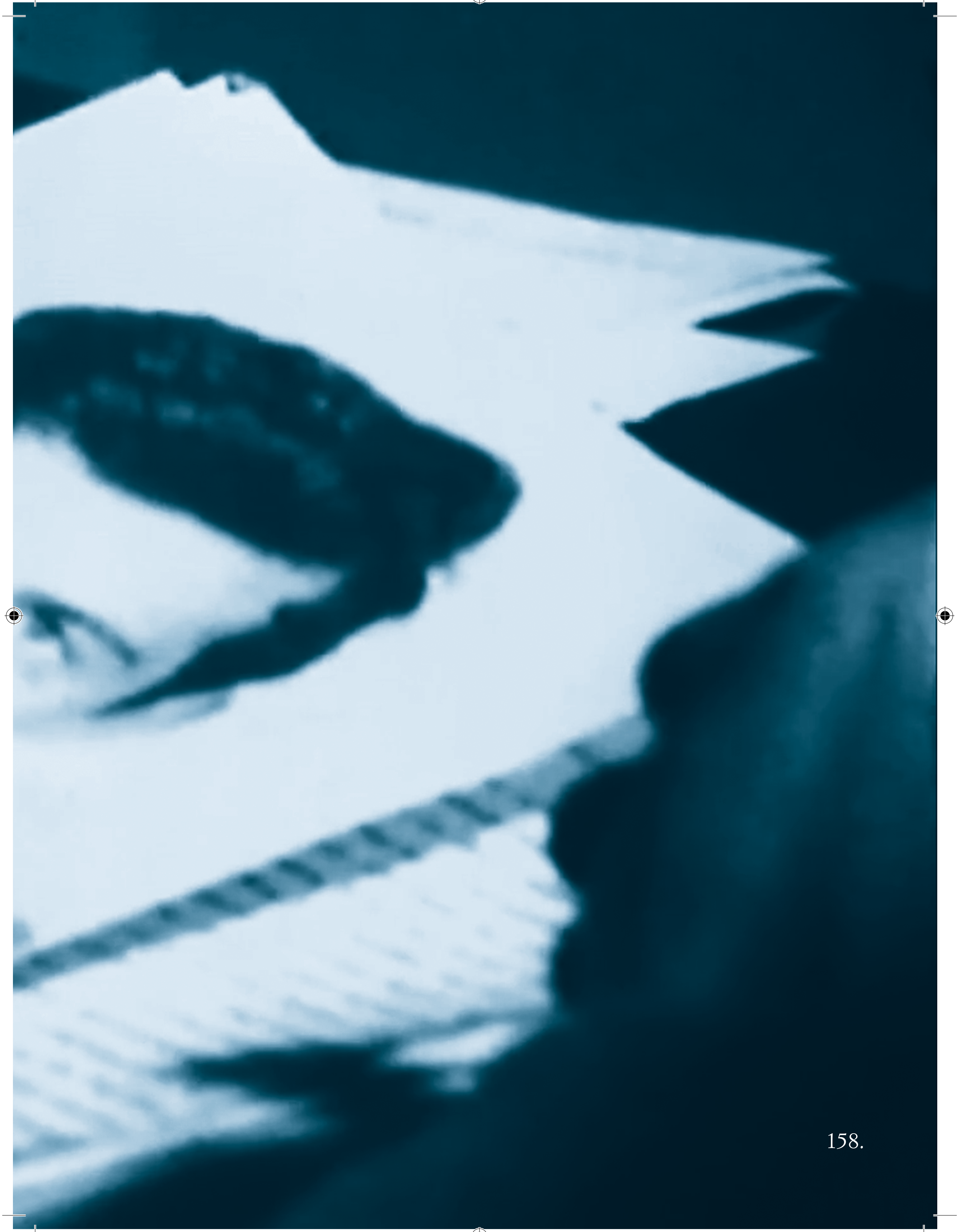


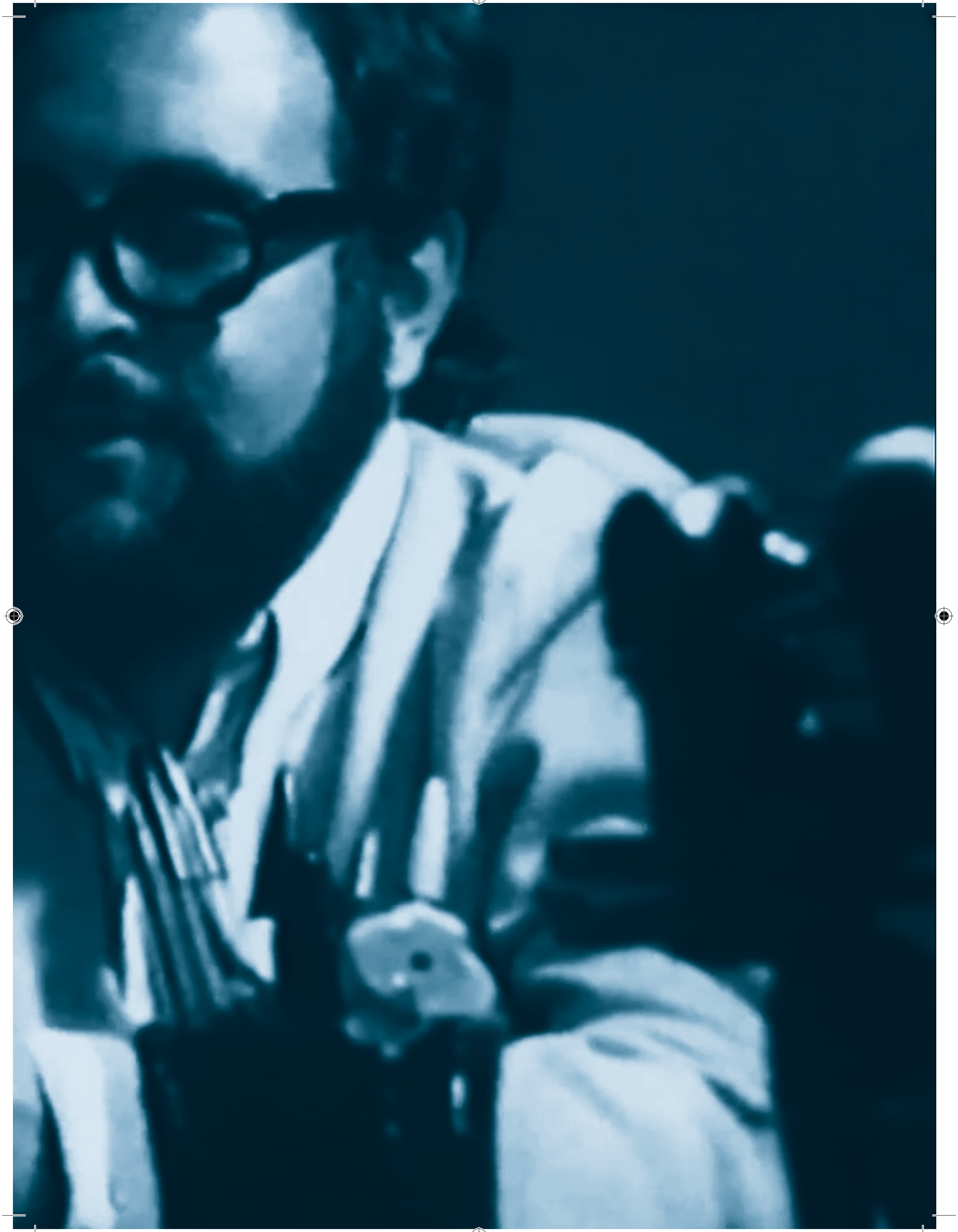


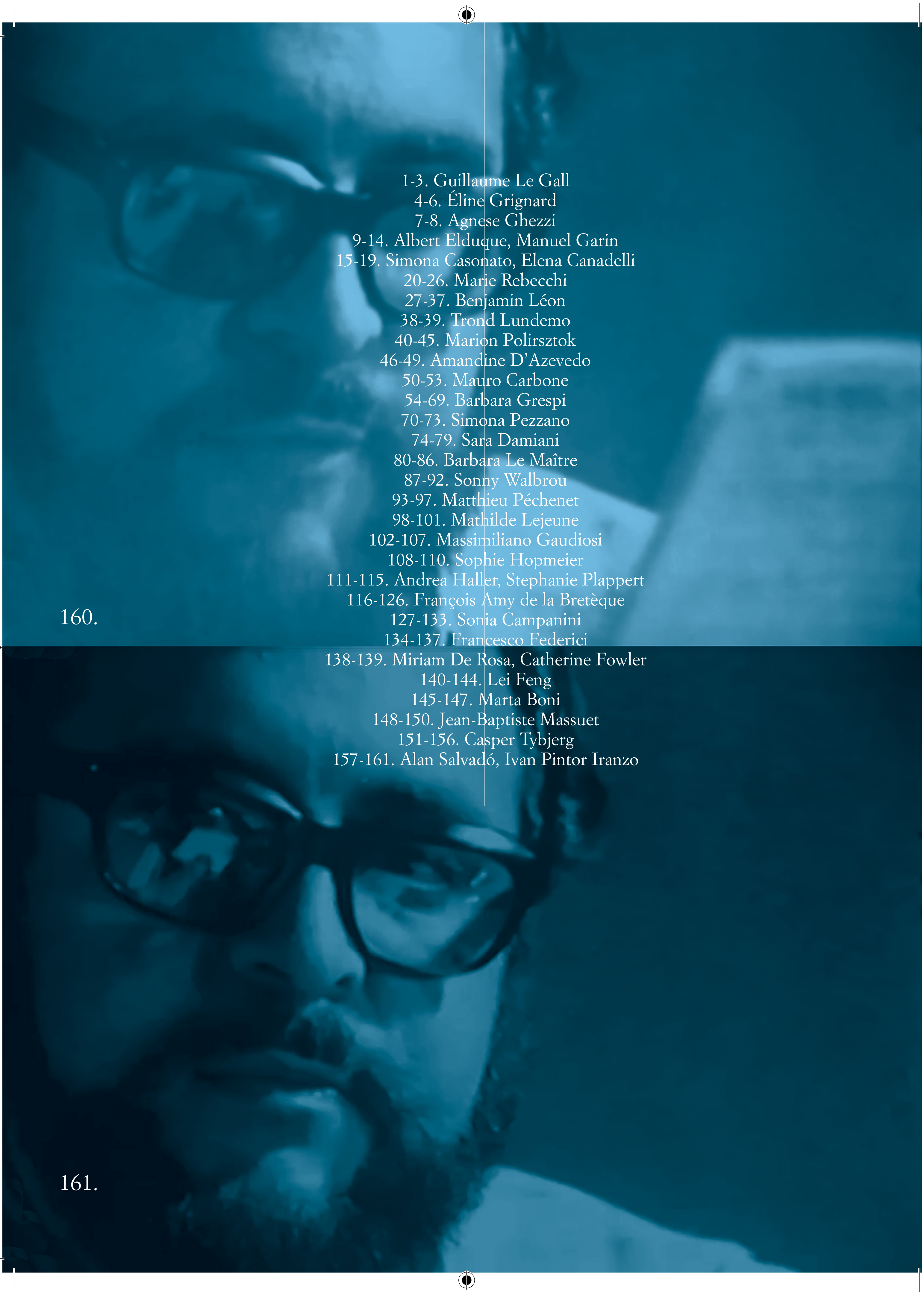
»LA PASSION DE JEANNE D'ARC«
METTEUR EN SCÈNE
KARL TH. DREYER
FENSTER-SEITE
MUR DE FENÊTRE
CHORSTUHL-SEITE
ALTARRAUM-RÜCKWAND
MUR DE ABSIDE
MUR DE PORTE
TÜR-SEITE
PORTE
TÜR
PORTAIL
FENSTER
FENÊTRE
PODIUM
STUFE
ALTAR
SÄULEN
COLONNE
KAPELLE
CHAPELLE
PLAN AVEC DEVELOPPEMENT POUR LA CHAPELLE CONSTRUITE AU STUDIO DE BILLANCOURT
ÉCHELLE 1=50
ARCHITECTE-DECORATEUR Hermann Warm
EN ROUGE LES PARTIES MOBILES
PORTAIL PORTAL
COUPE LONGITUDINALE,
LÄNGSSCHNITT,
ABSIDE,
ALTARRAUM,
GRUNDRISS UND ABWICKLUNG FÜR DIE KAPELLE
GEBAUT IM FILMATELIER BILLANCOURT
MASZSTAB 1=50
FILMBILDNER Hermann Warm
ROT MARKIERTE DEKORATIONSTEILE BEWEGLICH.
PRODUKTION-SOCIÉTÉ-GENERALE DES FILMS. PARIS-SHAMPS-ELYSÉES

155.



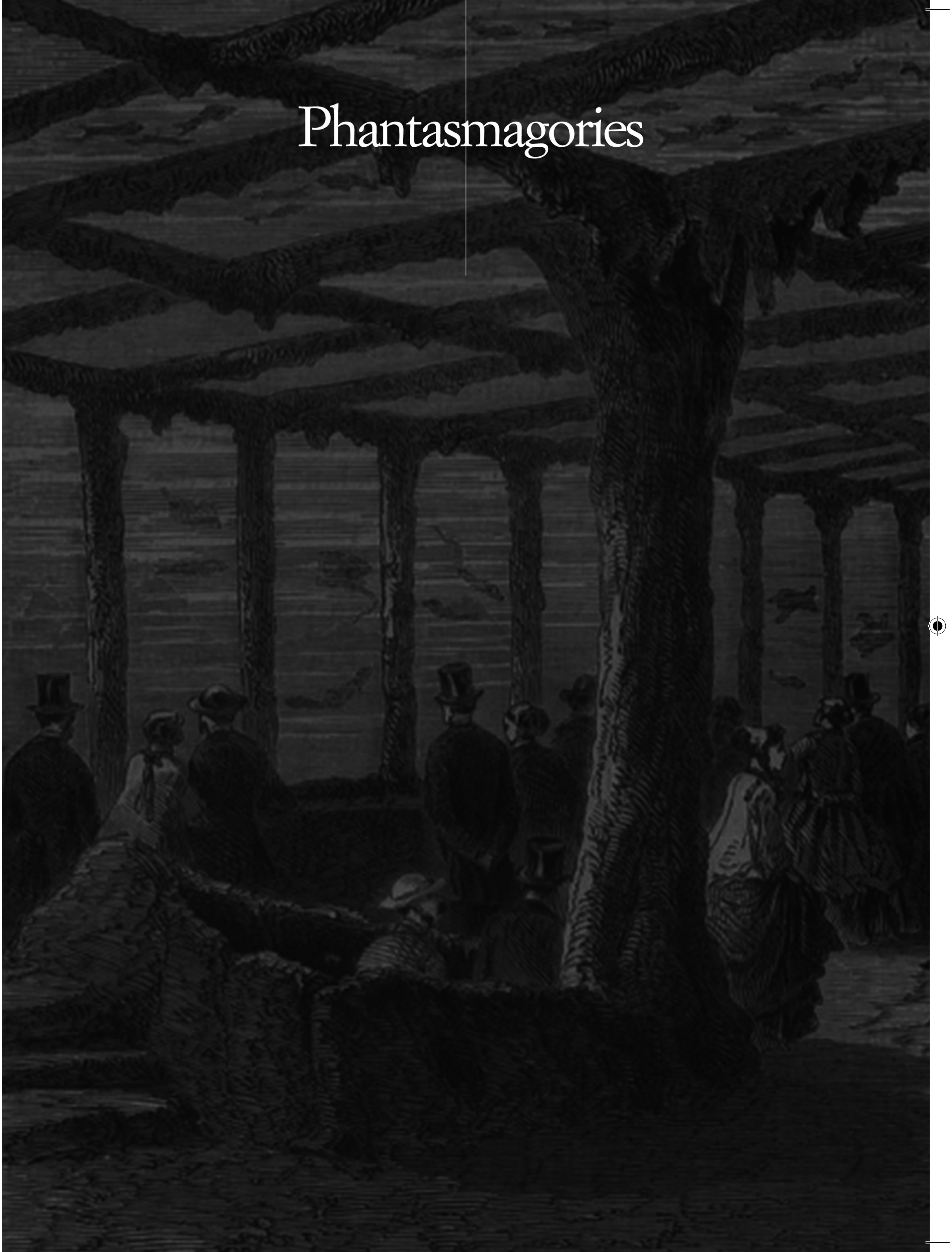






1-3. Guillaume Le Gall
4-6. Éline Grignard
7-8. Agnese Ghezzi
9-14. Albert Elduque, Manuel Garin
15-19. Simona Casonato, Elena Canadelli
20-26. Marie Rebecchi
27-37. Benjamin Léon
38-39. Trond Lundemo
40-45. Marion Polirsztok
46-49. Amandine D’Azevedo
50-53. Mauro Carbone
54-69. Barbara Grespi
70-73. Simona Pezzano
74-79. Sara Damiani
80-86. Barbara Le Maître
87-92. Sonny Walbrou
93-97. Matthieu Péchenet
98-101. Mathilde Lejeune
102-107. Massimiliano Gaudiosi
108-110. Sophie Hopmeier
111-115. Andrea Haller, Stephanie Plappert
116-126. François Amy de la Bretèque
127-133. Sonia Campanini
134-137. Francesco Federici
138-139. Miriam De Rosa, Catherine Fowler
140-144. Lei Feng
145-147. Marta Boni
148-150. Jean-Baptiste Massuet
151-156. Casper Tybjerg
157-161. Alan Salvadó, Ivan Pintor Iranzo

Phantasmagories



Édouard Arnoldy, Université de Lille – CEAC

Hic falsum index veri.
Le cinéma, la fantasmagorie, l'exposition du vrai et du faux (en histoire)[1]

> *L'imaginaire collabore avec le réel dans les arts où s'opère la naissance d'un univers fantôme doté d'effet de réalité. La mission du cinéma est d'affronter cette double nature du réel. Il oblige les spectateurs à se poser des questions fondamentales sur leur vie, leur société, leur monde, voire sur l'homme lui-même. Que ce soit par les moyens du cinéma de fiction, du cinéma-vérité, par les moyens du film de montage, par des moyens autres, il s'agit de confronter l'humanité avec son image pour provoquer une secousse, un choc d'où peut naître une réflexion, une prise de conscience, une ouverture à la pensée interrogative, à la pensée chercheuse.*
>
> Edgar Morin (2018)[2]

Des contours élargis d'une historiographie critique

Dans le cadre d'un axe de recherche « Théories critiques et cinéma », nous sommes plusieurs à l'Université de Lille à articuler notre réflexion sur les possibles ouvertures de la Théorie critique à une historiographie du cinéma.[3] Quelques noms ont vite fréquenté nos discussions. Walter Benjamin et Siegfried Kracauer d'abord, Theodor Adorno et Max Horkheimer ensuite se sont vite imposées comme les figures tutélaires de cette réflexion. Depuis, d'autres figures de la Théorie critique sont venues se joindre à ces penseurs féconds, dont Ernst Bloch. Surtout, le principal fil conducteur de nos lectures est le lien fort, voire l'analogie puissante, qu'ils établissent entre l'histoire et le cinéma, entre l'écriture de l'histoire et la pratique cinématographique. Dans tous les cas, plusieurs textes importants de ces auteurs constituent autant de jalons théoriques particulièrement éclairants dans le cadre d'une historiographie du cinéma ou, pour être plus précis, *une historiographie critique du cinéma*. Cette recherche repose donc bien sur un socle constitué de réflexions singulières sur l'histoire et les médias photographiques, mais aussi de textes fondateurs d'une pensée critique, au sens le plus large de ce terme, invitant à toujours réfléchir au *comment écrire l'histoire du cinéma*, sans négliger la photographie et sans jamais perdre de vue d'autres médias, récents (le jeu vidéo) ou plus anciens (des dispositifs audiovisuels antérieurs ou contemporains du cinéma depuis ses débuts). Là, parmi les noms qui s'imposent à nous en vue d'une approche critique de l'histoire et des médias photographiques, on peut relever Michel Foucault, Lucien Febvre, Karl Marx, Carlo Ginzburg ou encore Fernand Braudel. On peut y ajouter quelques lecteurs avisés, spécialistes reconnus de ce territoire d'investigation, comme Marc Berdet et Bruno Tackels pour Benjamin, Philippe Despoix et Nia Perivolaropoulou pour Kracauer, ou encore Martin Jay et Miriam Hansen pour leurs commentaires notamment sur Adorno, Benjamin et Kracauer.

En ce sens, le premier élan de cette recherche est non pas, par ce biais ou ces lectures, de *sortir* de la Théorie critique francfortoise mais plutôt de l'*ouvrir* à des textes qui, certes, ne participent pas directement à cette expérience intellectuelle unique, qu'ils y soient étrangers ou qu'ils appartiennent à une génération suivante, mais qui, tous, convergent naturellement vers un même espace de réflexion, s'inquiétant toujours des choix et des questions épistémologiques qui se posent à l'historien (du cinéma) et au théoricien (du film). C'est bien pourquoi l'emploi du pluriel est privilégié, référant plutôt à *des* théories critiques. En ce sens, la présente réflexion s'accorde certainement avec l'esprit directeur de la Théorie critique de Francfort telle que l'épistémologue américain Martin Jay la présente :

> *Au cœur même de la Théorie Critique, il y eut une véritable aversion pour tout système philosophique fermé. Essayer de la présenter sous une forme systématique, ce serait donc trahir son côté essentiellement ouvert, tout ce qui en elle est exploration, inachèvement. […] Ce n'est certainement pas un hasard si Horkheimer a choisi de développer et de présenter ses idées sous forme d'essais et d'aphorismes, plutôt que de produire quelques-uns de ces gros volumes encombrants qui jalonnent l'histoire de la philosophie allemande. […] La Théorie Critique s'élabora, en effet, à travers une série de critiques d'autres penseurs et d'autres traditions philosophiques. Elle se développa donc à travers un dialogue, et sa genèse fut tout aussi dialectique que la méthode qu'elle prétendait appliquer aux phénomènes sociaux.*[4]

À l'évidence, la Théorie critique n'est pas confortable. Son « côté essentiellement ouvert, tout ce qui en elle est exploration, inachèvement », doit naturellement conduire à cette « série de critiques d'autres penseurs et d'autres traditions philosophiques ». Enfin, *la forme* de ces théories constitue une de leurs singularités majeures (*Le Livre des passages* de Benjamin en est le plus bel exemple), en même temps que la face visible de ce qui en constitue le fondement, leur dimension critique. La singularité de la Théorie critique est bien indissociable de la forme que peut prendre son écriture. Jay ne manque pas d'en considérer l'importance dans le portrait qu'il établit de la Théorie critique, observant *comment* se présentent les réflexions de ces penseurs majeurs du 20^e^ siècle. Jay indique qu'on a là, au fond, affaire à une manière de penser et d'écrire une histoire bienveillante à l'égard de quelque modèle créatif.

Du principe espérance (de la fantasmagorie)

Dans le cadre de recherches menées à Lille, un concept s'est imposé comme un possible fil conducteur théorique – traversant des recherches pourtant effectuées sur des objets distincts. Ce concept est celui de fantasmagorie, précisément parce qu'il constitue possiblement le levier à un geste critique en vue de l'étude d'objets situés à une proximité plus ou moins grande de notre domaine, appartenant à une histoire élargie des « médias photographiques ».[5] Qu'il soit question de l'Exposition universelle de Paris en 1900, de pratiques d'expositions dans des albums ou des atlas (de Talbot à Malraux ou Warburg), de *The Family of Man* ou du festival bruxellois L'Âge d'or, toutes ces formes d'expositions nous invitent à penser les discours et les idées de photographie et de cinéma, plus largement de culture visuelle, qu'elles véhiculent.

Ces explorations méritent d'être effectuées en même temps qu'une réflexion théorique sur les questions d'histoire qu'elles posent. C'est là que l'observation des contours du concept de fantasmagorie permet de considérer ce terme comme un concept opérant possiblement dans le cadre particulier de l'écriture de l'histoire du cinéma.[6] Plus particulièrement sa déclinaison dans l'Exposé de 1939 qui ouvre le *Livre des passages*, le terme est déterminant pour Benjamin, qui en fait le concept clé de cette introduction de son œuvre monumentale. Cette observation permet de relever au passage que l'Exposé de 1939 de Benjamin essentiellement dédié à la question de la fantasmagorie est écrit en même temps que la troisième version de « L'œuvre d'art à l'époque de sa reproductibilité technique » et *Les Thèses sur l'histoire.* Il n'est sans doute pas, en ce sens, aventureux de considérer la convergence des réflexions que Benjamin porte à l'histoire, aux médias photographiques et à la fantasmagorie autour de 1939-1940. Sans doute peut-on même les considérer comme indissociables ?

Dépassant le cadre limité du spectacle en vogue au 19^e^ siècle, il envisage ainsi le cinéma comme une fantasmagorie.[7] Pensant en priorité les tensions paradoxales qui caractérisent diverses formes d'expériences visuelles et sonores tout au long du 19^e^ siècle, l'exposé de 1939 se termine par une sentence :

> *Le siècle n'a pas su répondre aux nouvelles virtualités techniques par un ordre social nouveau. C'est pourquoi le dernier mot est resté aux truchements égarant de l'ancien et du nouveau, qui sont au cœur de ces fantasmagories. Le monde dominé par ses fantasmagories, c'est – pour nous servir de l'expression de Baudelaire – la modernité.*[8]

Dans une lettre adressée en 1936 à Benjamin, Adorno critique « L'œuvre d'art à l'époque de sa reproductibilité technique », pour dire ouvertement son désaccord quant à la complaisance de son ami à l'égard du cinéma et ses prétendues capacités à nous faire voir autrement.[9] Si Benjamin a conscience des limites du cinéma, c'est bien parce qu'il envisage le 7e Art naissant comme une fantasmagorie, soit le lieu de contradictions permanentes entre une réalité artificiellement reconstruite de façon mimétique (ce sont les mots d'Adorno après sa visite des studios de Neubabelsberg) et un regard inédit sur le monde, neuf, critique, transfiguré (grâce aux procédés à sa disposition comme le montage, la surimpression, le ralenti). Ce qui distingue peut-être Benjamin d'Adorno, ce n'est certainement pas une quelconque fascination ou une forme d'aveuglement pour le cinéma de la part de l'auteur de « L'œuvre d'art… », mais plutôt l'intuition de ce dernier sur les possibles capacités critiques du cinéma. Pour autant, Benjamin observe sans indulgence les propres contradictions de l'art cinématographique, entre ce que l'image cinématographique, le film, n'est pas (la réalité) et ce qu'est le cinéma (une industrie, une forme puissant de la culture de masse), soit une représentation illusoire… potentiellement critique.

De son côté, Siegfried Kracauer s'entend plutôt avec Benjamin sur les capacités du film à rendre visible ce que nous ne percevons pas naturellement, et à accéder à quelque chose comme un inconscient optique. Pour l'auteur de *Théorie du film*, le cinéma a certainement toutes les caractéristiques d'une fantasmagorie. Comme l'écrit Graeme Gilloch, « la fascination de Kracauer pour ce médium » tient certainement en ce que, pour lui, « le film est fantasmagorique » ou « l'ultime fantasmagorie de la modernité ».[10] Sans doute, la très grande proximité de Benjamin et de Kracauer se focalise-t-elle autour de ce concept. Chez eux et plusieurs de leurs contemporains (dont Béla Balázs) qui, symptomatiquement, emploient un même vocabulaire, l'aveuglement de la distraction va de pair avec la rédemption de la réalité matérielle par l'entremise du médium technique (la photographie, le cinéma). Cette vision plutôt positive de ces fantasmagories détermine le rapport qu'ils entretiennent avec celles qui concernent au plus près l'historien du cinéma, l'histoire et le cinéma.

Refusant d'enfermer la fantasmagorie sous une acception unique, sans aucune forme d'aspérité (ce qui serait contraire à l'esprit même de la Théorie critique, Martin Jay nous l'a dit), il vaut sans doute non pas de convenir avec Benjamin ou Kracauer d'une définition stricte du concept mais plutôt d'en mettre en relief la portée, l'envergure large, en vue d'une réflexion d'ordre historiographique dans le champ des médias photographiques. C'est précisément à quoi invite Ernst Bloch en plusieurs lieux d'*Héritage de ce temps* :

> Hic falsum index veri*, ici le faux est l'indice du vrai. Si l'on observe ce principe, certaines parties de l'objectivité se détachent tout de même ; la raison se détache de la tromperie et de sa clarté apparente […] c'est le masque qui peut toujours changer.*[11]

Parlant là d'économie, ici de la pratique musicale de Stravinski, Ernst Bloch établit une relation absolument indéfectible entre le vrai et le faux, entre la réalité et l'illusion, entre le réel et sa distraction. Non seulement indissociables, ces contraires annoncent les uns et les autres successivement : le faux atteste de la présence du vrai ; le faux est comme une part de vrai déjà-là, en latence ; inversement, le vrai dissimule vaille que vaille le faux – l'un se parant du masque de l'autre pour faire meilleure figure ! C'est bien cette dualité, cette tension entre ces contraires qui définirait le mieux toute fantasmagorie. Ainsi, Bruno Tackels, dans son incontournable *Petite introduction à Walter Benjamin*, considère qu'en ce sens « la fantasmagorie, loin d'être seulement source d'illusions, se renverse en son contraire et apparaît comme illumination ».[12] Le point d'aboutissement de la fantasmagorie doit être ce retournement contre elle-même. De son côté, Olivier Agard note toute son ambiguïté – qui en détermine toute sa singularité :

> *Comme chez Benjamin (au moins dans le premier exposé sur les Passages parisiens), la fantasmagorie parisienne est in fine ambiguë. Liée à l'aura de séduction et de rêve dont s'entourent les marchandises, elle recèle également des promesses de bonheur.*[13]

La fantasmagorie, « de complice du pouvoir marchand, peut se retourner et devenir l'instrument de sa perte » note encore Tackels.[14] La dimension critique, au sens politique fort du terme, vaut d'être mise en perspective, constituant bien le centre névralgique de la réflexion des *Thèses* ou du *Livre des passages.* Non sans songer ici au regard critique qui peut être porté sur les Expositions universelles ou une exposition comme *The Family of Man* à l'aune du concept benjaminien de fantasmagorie, il vaut de lire attentivement ce que Bruno Tackels écrit encore ailleurs dans sa *Petite introduction à Walter Benjamin* :

> *La fantasmagorie est le dernier éclat d'un monde capitaliste au bord de l'écroulement, l'ultime signe de détresse capable d'indiquer – si on le lit bien – que ce monde, tout occupé à masquer ses manques, est pourtant en passe de s'écrouler sous le poids de ses carences, qui peuvent aussi bien se dire injustices.*[15]

Parmi les maisons et autres lieux de rêve du collectif, ces signes d'une époque où règne en maître la fantasmagorie, Benjamin songe aux passages, jardins d'hiver, panoramas, usines, musées, cabinets de cire, casinos, gares, pavillons thermaux, sans oublier les expositions universelles et les salles de cinéma.[16] Reste à y ajouter à cette liste un domaine par où transitent les valeurs du Capital victorieux : l'histoire. La conception de l'histoire qui prévaut chez Kracauer, des années 1930 jusqu'à l'écriture de *L'Histoire. Des avant-dernières choses*, est certainement proche de celle dont Benjamin définit les contours dans *Le Livre des passages* et, avec la plus grande précision, dans ses *Thèses sur l'histoire.* Dès lors qu'ils évaluent les qualités de l'histoire, les uns et les autres envisagent pour ce domaine une forme d'inconscient historique. Comment, dans la foulée d'un Ernst Bloch, ne pas songer aux visages « se tournant le dos » de Janus que Benjamin dispose en exergue de l'« Exposé de 1939 » de son *Paris, Capitale du XIX^e^ siècle* ? « L'histoire est comme Janus, elle a deux visages : qu'elle regarde le passé ou le présent, elle voit les mêmes choses » : que nous dit en effet cette citation placée à un endroit stratégique d'une œuvre monumentale, *Le Livre des passages*, elle-même constituée comme une collection de citations, d'aphorismes, d'extraits de presse et de livres, d'auteurs de renom ou pas, etc. ? Ce n'est pas tant le retour du même que Benjamin nous invite ici à pointer du doigt – idée d'histoire qu'il considère plutôt comme le stigmate de l'historisme vilipendé par lui tout au long de cette somme – mais bien *cette double face de l'histoire* qui est pour lui une forme fantasmagorique par excellence. Toute fantasmagorie aurait ainsi « deux visages », deux points de vue et deux visées distinctes.

Elle est ainsi un instrument aux mains des vainqueurs, le vecteur de ses idéaux. Mais là aussi, comme pour toutes les fantasmagories dénoncées par Benjamin, comme par Kracauer et Bloch, le diagnostic reste positif : tant l'histoire que la photographie et le cinéma peuvent conduire à la « rédemption de la réalité matérielle » (Kracauer) et participer à « faire sauter le contenu de l'histoire » (Benjamin).[17] Sur ce point, Adorno n'est certainement pas tout à fait sur la même longueur d'ondes que ses camarades, notamment après sa visite des Studios de Neuebabelsberg. Des tensions font jour dans ses correspondances avec Benjamin. Pour autant, Adorno propose dans son essai sur Wagner une définition de la fantasmagorie assez proche de celle de Benjamin ou de Bloch, qui s'accorde très bien à ses différentes manifestations au croisement des 19^e^ et 20^e^ siècles :

> *Par la diffamation du plaisir, qu'elle met elle-même en lumière, la fantasmagorie s'associe dès l'abord l'élément de son propre déclin. L'illusion implique la désillusion.*[18]

Décidément, la Théorie critique – du moins à travers Benjamin, Kracauer, Bloch et, enfin, Adorno – paraît s'entendre sur cette idée que la fantasmagorie finit (ou, idéalement, doit finir) par s'en prendre à elle-même, à l'idéologie et les valeurs qu'elle véhicule. La fantasmagorie, c'est en quelque sorte tout et son contraire ou, en termes freudiens, un (possible) renversement en son contraire.

Fantasmagorie, théorie du film et histoire du cinéma (critique)

Un des points de rencontre les plus forts entre Benjamin et Kracauer est certainement une idée très proche de cinéma et d'histoire. Leur ambition première est de lutter sans relâche contre les présupposés d'une histoire dictée par les « vainqueurs », d'atteindre ce qu'on ne sait déjà, réfuter ce que l'histoire nous dicte, et même jusqu'à accéder à ce qui n'a pas eu lieu, au dévoilement de ce réel bien présent mais parfois imperceptible, une sorte d'inconscient historique – comme Benjamin parle d'un inconscient optique révélé grâce aux médias photographiques. Pour eux, l'histoire et le cinéma sont potentiellement ces « choses ultimes avant la dernière », ces avant-dernières choses soustraites aux vérités dernières de la pensée (dominante). *A contrario* de l'historicisme, l'histoire et les médias critiques tels qu'ils les pensent doivent s'appuyer sur le refus de « la méthode de l'empathie » qui est le propre, selon Benjamin, de l'historiographie historiciste : « Entrer en empathie avec le vainqueur bénéficie toujours par conséquent à quiconque domine », écrit-il dans sa Thèse VII. « Tous ceux », ajoute-t-il, « qui jusqu'ici ont remporté la victoire participent à ce cortège triomphal où les maîtres d'aujourd'hui marchent sur les corps des vaincus d'aujourd'hui. À ce cortège triomphal, comme ce fut toujours l'usage, appartient aussi le butin. Ce qu'on définit comme biens culturels ».[19]

Penser la réécriture de l'histoire et la reconfiguration de notre regard par les médias photographiques est bien le socle des textes de Benjamin et Kracauer.[20] Ainsi, ce dernier dit très explicitement que la réalité vue au prisme de la caméra doit apparaître sous un jour nouveau :

> *Bien entendu, ce qui présente un réel intérêt, ce ne sont pas les images qui apportent une confirmation mais celles qui mettent en question les idées que nous avons du monde matériel. Dès que les films confrontent la réalité telle que l'a captée la caméra avec ce qu'à tort nous imaginons qu'elle est, toute la charge de la preuve retombe sur les seules images.*[21]

Apparentant lui aussi le cinéma à une fantasmagorie, Bloch parle de son côté du cinéma tout à la fois comme d'une « gigantesque imposture » et d'un médium capable d'approcher au plus près la réalité. Marchandise, levier du capital, véhicule de l'idéologie des « vainqueurs » (selon l'expression de Benjamin), le cinéma a sans doute autant pour vocation – ce serait le propre de la fantasmagorie – à se retourner contre lui-même et, par la même occasion, à affronter celui-là même qui le produit, le capitalisme :

> *Le film qui, par la photographie et la prise de son, est à même d'enregistrer et de reproduire dans un flot mimique toute la réalité de l'expérience, est une sorte de miroir puissant qui déforme mais concentre également les éléments de cette réalité, offrant à l'homme son ersatz et son illusion grandiose, mais aussi son information riche d'images qu'est ce trésor de visions venant combler le désir, propre à l'homme, de plénitude vitale. Hollywood est devenue une gigantesque imposture, mais le film réaliste, dans ses meilleures réalisations anticapitalistes, qui ne participent plus du capitalisme, peut représenter en tant que miroir de l'espérance critique caractérisant une image mimée des jours qui changent le monde. La pantomime du film est en fin de compte celle de la société, aussi bien dans ses différents modes d'expression que, surtout, dans les contenus prometteurs qu'elle propose comme autant d'exemples à suivre ou à ne pas suivre.*[22]

Comme Benjamin dans « L'œuvre d'art à l'époque de sa reproduction technique » et comme Kracauer dans *Théorie du film*, Bloch réserve plusieurs passages aux moyens à la disposition du cinéma pour révéler ce que toute fantasmagorie tend à dissimuler. Le montage, le gros plan visuel ou sonore (Bloch parle des expressions micrologiques des choses, comme pour dire sa conception animiste du cinéma), le ralenti et l'accéléré, voilà quelques-uns des procédés dont dispose le cinéma pour dénoncer ce que toute fantasmagorie dissimule de la réalité. Comme l'écrit Kracauer, « le film rend visible ce que nous n'avions pas vu, et que peut-être ne pouvions pas voir, avant qu'il ne soit là. Il nous aide puissamment à découvrir le monde matériel ».[23] C'est en ce sens qu'il parle de la possible rédemption de « la réalité matérielle », s'accordant avec plusieurs de ses contemporains qui envisagent le cinéma comme une fantasmagorie (toujours en état de tension entre ce qu'elle promeut et ce qu'elle dénonce – tel Janus et ses deux visages). De son côté, Ernst Bloch note en effet :

> *Que dire du film critique et révolutionnaire – où l'on chercherait en vain toute trace de panoptique ou de trompe-l'œil. En effet, ce n'est pas seulement à l'homme mais aussi aux choses que s'est étendue la mimique nouvelle, aux choses muettes de nature et pourtant curieusement éloquentes chez certains metteurs en scène. Que l'on se rappelle les marmites qui oscillent avec le bateau dans Le Cuirassé Potemkine d'Eisenstein ou, toujours dans le même film, les grandes bottes qui piétinent tout sauvagement sur leur passage en descendant les escaliers d'Odessa. […] On peut même aller jusqu'à dire que le film parlant a donné naissance à une pantomime assez paradoxalement audible, c'est-à-dire à une pantomime du son. Le micro permet à l'oreille de percevoir les bruits spécifiques et bien différenciés de ciseaux coupant la toile, la laine ou la soie ; le tambourinement de la pluie contre les carreaux, la chute d'une cuiller sur un sol de pierre, ou le craquement d'un meuble s'inscrivent dans un monde de l'observation et de l'expression micrologiques.*[24]

C'est avec ce regard qu'il est loisible d'observer d'autres fantasmagories dénoncées par Benjamin, Bloch ou Kracauer, notamment dans *Le Livre des passages.* Comme les médias photographiques qui y sont présentés parmi leurs fleurons, les Expositions universelles au tournant du siècle et, plus tard, des expositions de photographies constituent certainement parmi les vecteurs de l'idéologie des vainqueurs et d'un Capital triomphant. Dans tous les cas, il faut d'abord y voir les lectures critiques d'une forme fantasmagorique parmi plusieurs, les expositions parmi la photo, le cinéma, l'histoire, les passages, etc. Produits et promoteurs du capitalisme, le cinéma et la photographie, l'histoire et les Expositions sont parmi ces fantasmagories qui « en retour » dénoncent possiblement ce qu'elles sont.

Voilà bien dans quel état d'esprit les uns et les autres, Bloch, Benjamin et Kracauer, observent les manifestations fantasmagoriques qui participent à la consécration d'une pensée dominante, celle des vainqueurs, tout au long du 20^e^ siècle. La photographie et le cinéma doivent ainsi contribuer à leur célébration, et servir leurs succès. Pour autant, les médias photographiques recèlent en eux des qualités, un potentiel critique, qui attend d'être rédimé d'un état de latence trompeur. Évoquant la figure du chiffonnier dans l'œuvre de Benjamin, Marc Berdet ne dit rien d'autre, réaffirmant les contours de la fantasmagorie comme le lieu de tensions paradoxales :

> *Si « le vrai est un moment du faux » [pour le chiffonnier], ce n'est pas en tant que les discours subversifs se transforment immédiatement en slogans publicitaires dans la société du spectacle, mais plutôt en ce que les slogans publicitaires peuvent se transformer en discours subversifs dans un reportage utopique du sensible. Il y a du matérialisme anthropologique dans les fantasmagories ; le tout est de le réactiver.*[25]

Parmi les nombreuses formes fantasmagoriques exhumées par Bloch, Benjamin et Kracauer, les expositions et les médias photographiques jouent un rôle déterminant depuis le 19e siècle pour véhiculer quelque idéal moral et quelque modèle économique et de société. Produits exemplaires du Capital, ces fantasmagories peuvent néanmoins se détacher de son emprise, révéler ce qui est dissimulé à notre regard et à notre entendement. Idéalement, toutes finissent par laisser tomber le masque pour se muer en instrument de lutte contre elles-mêmes. Le « principe espérance » – selon le titre de l'ouvrage magistral de Bloch – est bien celui-là. Mais, comme le note le complice de Benjamin et de Kracauer, « la bête fabuleuse ne se montre que rarement au grand jour ».[26]

Au fil du temps (des fantasmagories)

L'observation de formes fantasmagoriques hier ne dispense pas de veiller au présent. Au contraire, elle y invite. Prétendre autre chose consisterait sans doute d'abord à privilégier une histoire de souffle court (sans rien retenir des leçons d'un Fernand Braudel). Ensuite, ce serait considérer que le progrès (ou le temps) permet d'effacer les stigmates d'une époque où le Capital victorieux abreuvait de rêves en tous genres les employés, les cols blancs et quelques flâneurs – parmi les prétendus vainqueurs des dernières révolutions, industrielle et technologiques. Ce refus d'un esprit et d'une histoire à sens unique, cet engagement en vue d'*une pensée critique* dissémine fort heureusement au fil du temps et, partant des Benjamin, Bloch et Kracauer, trouve un terrain d'accueil chez plusieurs chercheurs et artistes contemporains majeurs. Allan Sekula et Philippe Bazin, photographes et théoriciens de leur art, Jean-Luc Godard, toujours, et Claire Angelini, artistes et cinéastes, sont de ceux-là. Par ailleurs, des chercheurs ne sont pas insensibles à quelques-unes des prérogatives de la Théorie critique. C'est bien ainsi qu'il vaut d'écouter la leçon inaugurale au Collège de France où Patrick Boucheron, tel un *outsider* de la Théorie Critique, défend en 2015 une histoire « proprement déconcertante » :

> *Elle [l'histoire] trouble les généalogies, inquiète les identités et ouvre un espacement du temps où le devenir historique retrouve son droit à l'incertitude, se faisant accueillant à l'intelligibilité du présent. […] Car ce temps n'est pas le passage obligé d'un devenir orienté qui, les dépassant, rendrait caduques ses formes anciennes. Il est ce passé accumulé dont l'archéologie vise les couches toujours actives – utiles, en somme, à une compréhension du fait politique aujourd'hui.*[27]

C'est une interprétation analogue qui peut prévaloir à la lecture des propos d'un Edgar Morin, réactualisés en 2018 dans un ouvrage consacré à ses écrits sur le cinéma des années 1950-60, quand le sociologue dit l'importance déterminante de « confronter l'humanité avec son image pour provoquer une secousse, un choc d'où peut naître une réflexion, une prise de conscience, une ouverture à la pensée interrogative, à la pensée chercheuse ». Voilà encore une fois une mise en garde qui impose un éveil constant, face à un danger toujours là, et qui détermine positivement une forme d'inquiétude mûrement pensée et agissante – pas de ces angoisses irréfléchies qui tétanisent.[28] Voilà bien autant de *façons de penser* qui engagent possiblement à évaluer la puissance des fantasmagories à travers le temps. Les « leçons d'histoire » de la Théorie critique invitent décidément à ne pas se voiler la face, à traquer toutes ces fantasmagories qui nous abreuvent d'illusions, et, surtout, à ne jamais se satisfaire – encore une fois ! – de l'état actuel du présent, et faire comme si de rien était.

Notes

[1] Je me permets de renvoyer à mes dernières publications où il est largement question de ce concept de « fantasmagorie » : *Fissures. Théorie critique de l'histoire et du cinéma d'après Siegfried Kracauer*, Mimesis, coll. « Images, médiums », Milan 2018 et *Le Bruit éprouvant (au cinéma)*, La Lettre volée, coll. « Essais », Bruxelles 2018.

[2] Edgar Morin, « Préface », dans *Le Cinéma un art de la complexité. Articles et inédits – 1952-1962*, Éditions du Nouveau Monde, Paris 2018, pp. 7-8.

[3] Depuis trois ans, un groupe s'est constitué à Lille autour d'un axe « Théories critiques et cinéma » (dans le cadre du programme « Imaginaires théoriques » soutenu par le Centre d'Étude des Arts Contemporains – CEAC, EA 3587). Trois recherches doctorales s'y inscrivent complètement, celle de Sonny Walbrou qui travaille sur la représentation du corps dans le cadre d'une culture visuelle entre les 19e et 20e siècles ; celle de Matthieu Péchenet qui place au cœur de sa recherche la figure du Témoin en histoire et dans les médias photographiques ; enfin, celle de Mathilde Lejeune qui effectue une étude détaillée des films et des écrits de Charles Dekeukeleire, dépouillant le Fonds du cinéaste belge déposé à la Cinémathèque royale de Belgique. De mon côté, les propositions théoriques conjointes en histoire et en cinéma de Kracauer ont focalisé mon attention ces deux ou trois dernières années. Ce texte a constitué, pour l'essentiel, l'introduction d'une communication « à quatre voix », réunissant ces trois chercheurs et moi-même. Ces quatre conférences ont été dispensées à Gorizia en mars 2018 dans le cadre du colloque international annuel organisé par l'Université d'Udine.

[4] Martin Jay, *L'Imagination dialectique. Histoire de l'École de Francfort (1923-1950)*, Payot, Paris 1977, p. 59.

[5] Dans *Théorie du film* (1960), Kracauer affirme cette idée que l'appréhension de la « réalité matérielle » par la photographie et le cinéma est comparable. Il y a ainsi lieu de considérer que ses réflexions sur la photographie « valent » pour le cinéma. Pour autant, il ne les confond pas, considérant leurs spécificités propres. Quand il les évoque ensemble, Kracauer parle des « médias photographiques » (Voir Siegfried Kracauer, *Théorie du film* [1960], Flammarion, Paris 2010).

[6] Walter Benjamin, *Paris Capitale du XIX^e^ siècle. Le Livre des passages* (1940), trad. Jean Lacoste, Les Éditions du Cerf, Paris 1989.

[7] Complétant avantageusement les éléments d'une histoire de la fantasmagorie développés par Laurent Mannoni (*Le Grand Art de la lumière et de l'ombre. Archéologie du cinéma*, Nathan, Paris 1995, pp. 136-175), Tom Gunning a pris le temps de poser les enjeux de ce dispositif particulier (« Fantasmagorie et fabrication de l'illusion : pour une culture optique du dispositif cinématographique », dans *Cinémas : revue d'études cinématographiques / Cinémas: Journal of Film Studies*, vol. 14, n° 1, 2003, p. 67-89, http://id.erudit.org/iderudit/008958ar, dernier accès 5 avril 2018).

[8] Walter Benjamin, *Paris Capitale du XIX^e^ siècle*, cit., p. 59.

[9] Theodor W. Adorno, « Autour de 'L'œuvre d'art à l'époque de sa reproductibilité technique' » [18/03/1936], dans *Sur Walter Benjamin*, Gallimard, coll. « Folio essais », Paris 1999, pp. 166-176.

[10] Voir Graeme Gilloch, « Optique urbaine. Le film, la fantasmagorie et la ville chez Benjamin et Kracauer », dans Philippe Simay, *Capitales de la modernité*, Éditions de l'Éclat, coll. « Philosophie imaginaire », Paris 2005, p. 125.

[11] Ernst Bloch, Héritage de ce temps [1962], traduction et présentation de Jean Lacoste, Éditions Klincksieck, coll. « Critique de la politique », Paris 2017, p. 181 et p. 193.

[12] Bruno Tackels, *Petite introduction à Walter Benjamin*, L'Harmattan, Paris 2001, p. 101.

[13] Olivier Agard, « Jacques Offenbach ou l'archéologie de la modernité », dans Nia Perivolaropoulou, Philippe Despoix, *Culture de masse et modernité. Siegfried Kracauer sociologue, critique, écrivain*, Éditions de la Maison des Sciences de l'Homme, Paris 2001, p. 207.

[14] Bruno Tackels, *Petite introduction à Walter Benjamin*, cit., p. 101 et p. 103.

[15] *Idem*, p. 103.

[16] Walter Benjamin, « [Maison de rêve, musée, pavillon thermal] », dans *Paris Capitale du XIX^e^ siècle*, cit., p. 423.

[17] Walter Benjamin, « Thèse XVI », repris dans Michael Löwy, *Walter Benjamin : avertissement d'incendie. Une lecture des thèses « Sur le concept d'histoire »*, PUF, Paris 2001, p. 109.

[18] Theodor W. Adorno, *Essai sur Wagner*, Gallimard, Paris 1966, p. 125. Voir également Theodor W. Adorno, Walter Benjamin, *Correspondance 1928-1940*, Gallimard, collection « Folio essais », Paris 2002.

[19] Walter Benjamin, « Thèse VII », dans Michael Löwy, *Walter Benjamin : avertissement d'incendie. Une lecture des thèses « Sur le concept d'histoire »*, cit., p. 55.

[20] On se rappelle ici la fameuse phrase de Nietzsche, extraite de *L'Utilité et de l'inconvénient de l'histoire*, placée en exergue de la Thèse XII : « Nous avons besoin de l'histoire, mais nous en avons besoin autrement que n'en a besoin l'oisif blasé dans le jardin du savoir ». Sur Benjamin lecteur de Nietzsche, voir l'article fort stimulant de Wohlfarth Irving, « Ça nous regarde. Réponse à la question : un rapport critique à la tradition épuise-t-il désormais notre rapport au passé ? », dans *Hermès, La Revue*, vol. 10, n° 1, 1992, pp. 153-163.

[21] Siegfried Kracauer, *Théorie du film*, cit., p. 432.

[22] Ernst Bloch, « L'image-souhait dans la danse, la pantomime et le film », dans *Le Principe espérance*, Payot, collection « Bibliothèque des philosophies », Paris 1976, p. 483.

[23] Siegfried Kracauer, *Théorie du film*, cit., p. 423.

[24] *Idem*, pp. 482-483.

[25] Marc Berdet, *Le Chiffonnier de Paris. Walter Benjamin et les fantasmagories*, Vrin, coll. « Matière étrangère », Paris 2015, p. 178.

[26] Ernst Bloch, *Le Principe espérance*, cit., p. 412.

[27] Patrick Boucheron, *Ce que peut l'histoire*, Collège de France/Fayard, Paris 2015, pp. 36-37.

[28] On songe ici en particulier à la « Thèse VI » de Walter Benjamin qui y parle d'un « instant du péril » toujours présent. Voir dans Michael Löwy, *Walter Benjamin : avertissement d'incendie. Une lecture des thèses « Sur le concept d'histoire »*, PUF, coll. « Pratiques théoriques », Paris 2001, p. 50.

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Établir des continuités critiques : Paris 1900, le corps en mouvement et le voyage immobile

> *La bourgeoise … n'a … pas substitué ipso facto aux formes d'exploitation du Moyen Age … une « exploitation ouverte » et bien visible. Elle n'a fait que remplacer l'exploitation, enjolivée d'illusions religieuses et politiques, par une autre forme d'exploitation voilée, une forme plus raffinée et plus difficile à démasquer.*[1]

En envisageant les nouveaux médias, ceux d'hier et d'aujourd'hui, on est systématiquement confronté à une somme considérable de discours et de techniques qui fantasment l'engagement du corps du spectateur ou de l'utilisateur. Ces fantasmes ont une réalité à la fois discursive, matérielle et esthétique, davantage, peut-être, que phénoménologique. Ainsi de l'immersion envisagée comme fantasmagorie, comme un vaste réseau de discours, d'images et d'appareils qui se rapportent au corps du spectateur comme ce qu'il doit éprouver. Une telle considération de l'immersion semble faire défaut à la pensée universitaire qui s'établit bien souvent en relais de l'industrie culturelle tandis qu'elle postule et distribue comme celle-ci des ruptures à tour de bras. L'enjeu de ce que nous appelons continuité critique consiste à réintroduire de la continuité, de la permanence, de la stagnation, justement là où les choses prennent l'apparence de la nouveauté et du changement. Il s'agit, en dépit de bien des nuances trompeuses, d'affirmer que rien ne change, là où s'affirme le contraire. Dans la perspective de la fantasmagorie envisagée comme retournement, il s'agit ici de passer par l'histoire et par les archives de la distraction pour les retourner contre le présent, comme ce qu'il n'a jamais cessé d'être. Au regard des pratiques audiovisuelles les plus récentes, l'étude de la culture spectaculaire fin-de-siècle et notamment des Expositions universelles constitue d'après nous un défi critique à l'étude des (nouveaux) médias, en ce sens qu'elle tend à révéler la dimension profondément immobile de ce qui apparaît à court terme comme nouveau. L'identification d'un spectateur (im)mobile autour de 1900, et de ce qu'on peut appeler le « voyage immobile », ne constituent donc pas seulement des moyens de compréhension de la culture visuelle d'une époque, mais également des outils critiques concernant ce qui nous est le plus proche.

Les Expositions universelles se présentent comme un immense réservoir de fantasmagories. De la fantasmagorie de l'histoire universelle à celle du progrès technique et scientifique, les expositions des sciences, de l'artisanat, des machines, des techniques, des peuples, des arts, chantent la douce et non moins implacable marche du capitalisme. On s'y rassure du passé et du retard des peuplades lointaines, leurs folklores nous fascinent, les œuvres d'art ainsi que les techniques les plus prestigieuses sont exposées comme autant de gloires nationales, et si la réunion des peuples prend des airs de grande famille, c'est pour mieux jeter le voile sur les multiples formes d'exploitation et de domination qui entravent *en réalité* ce qu'on a bien voulu présenter sous la forme d'un progrès technique et scientifique inéluctable, un progrès qu'on a même dit naturel[2] et ô combien bénéfique. A en croire de telles expositions, tout le monde y trouve son compte, c'est en tout cas ce qu'il est convenu d'interpréter dans les termes d'une magistrale « leçon des choses »[3] ; combien sont alors ingrats ceux qui ne savent pas se réjouir de toutes les richesses ainsi mises à leur portée. Les Expositions universelles se situent dans le prolongement d'un capitalisme culturel qui, la science et la technique dans un bras, l'objectivité et la rationalisation dans l'autre, fait montre d'une franche neutralité voire même d'une extrême sympathie. À ce titre, la fascination, l'émerveillement et la sensation constituent à coup sûr les maître-mots d'une intégration grandiloquente et d'une familiarisation en douceur, des hommes dans les sphères de la marchandise. Mais s'il est une fantasmagorie qui nous intéresse plus particulièrement ici et qui nous permet d'envisager tout à la fois l'individu, son corps, l'image et la technique, c'est ce que nous appellerons le « voyage immobile ».

De manière générale, le voyage immobile désigne la situation paradoxale de celui qui, ici, se retrouve, par le biais de l'image, de l'architecture, du spectacle, d'un mécanisme, mais aussi de la lecture, transporté ailleurs.[4] Dans le cadre des Expositions universelles, et plus particulièrement de celle de 1900, la fantasmagorie est double : c'est, au premier degré, l'illusion produite ou projetée par les dispositifs, mais c'est aussi la manière dont les expositions masquent les processus de familiarisation et d'intégration culturelle de la technique industrielle.[5] Car, ce que les Expositions augurent, c'est bien l'émergence de ce qu'Adorno et Horkheimer ont appelé l'industrie culturelle,[6] soit la contamination du divertissement ainsi que du corps du spectateur par les logiques de la production industrialisée.

On retrouve le discours du voyage immobile à propos de la photographie, ce dès 1852 dans le compte rendu que Louis de Cormenin réalise d'un album photographique de Maxime Du Camp. Cormenin s'y montre enthousiaste à l'endroit des voyages que le photographie offre au spectateur. Considérant d'une part que les découvertes techniques récentes ont considérablement impacté les notions de temps et d'espace, et d'autre part que dans ce processus la photographie nous dispense de nombreux voyages puisqu'elle nous les rapporte avec la plus grande exactitude, il écrit :

> *l'homme jusque-là confiné immobile dans un petit espace, pourra sans fatigue connaître la configuration de sa planète. […] Nous n'avons plus besoin de […] tenter de périlleux voyages ; l'héliographie, confiée à quelques intrépides, fera pour nous le tour du monde, et nous rapportera l'univers en portefeuille, sans que nous quittions notre fauteuil. […]Le meilleur moyen de traduire un voyage, c'est de faire voyager le lecteur lui-même, c'est de le lui rendre oculaire et palpable […].*[7]

De même, dans son commentaire du *Salon de 1859*, Louis Figuier, l'une des grandes voix du Progrès, parlera lui aussi d'un monde en portefeuille, l'exactitude et la précision photographiques nous dispensant d'entreprendre les plus aventureux voyages et nous permettant ainsi de les réaliser en salon, au coin du feu : « On peut ainsi, sans se déplacer, sans quitter le coin de son feu, jouir de spectacles ou se livrer à des études qui avaient été jusqu'ici le privilège exclusif de quelques heureux voyageurs : c'est le monde dans un portefeuille, c'est le spectacle dans un fauteuil […] ».[8]

Quelques vers d'un poème que le membre de la Société Française de Photographie, Édouard Guinand, rédige en l'honneur de Daguerre soulignent également cette proximité nouvelle de l'ailleurs que rend possible la photographie : « Par la sublime découverte / Vous franchirez les horizons ; / Vos yeux n'auront plus de prisons : / Toute terre vous est ouverte ».[9]

Le « voyage photographique » n'est pas en reste quant à la photographie stéréoscopique largement caractérisée par les vues de paysages et de monuments. Parlant de « voyages stéréographiques », Wendell Holmes considère le stéréoscope comme une « locomotive idéale ».[10] Le texte de l'auteur prend d'ailleurs la forme d'une déambulation dans les images.[11] Le polytechnicien Jacques Babinet renvoie également l'expérience stéréoscopique tout contre celle de la promenade : « le contemplateur stéréoscopique recevra *par l'instrument* la même impression qu'il eut reçue de la nature elle-même. […] *Il se promènera par la vue* entre les arbres fuyant les uns derrière les autres comme dans une forêt, et les colonnes, les arcs-boutants, les statues du monument, laisseront la vue tourner tout à l'entour et pénétrer entre les parties saillantes et la masse centrale de la fabrique ».[12] La fantasmagorie du voyage immobile est plus saisissante encore à travers la promotion qu'un article du *Journal Amusant* réalise d'un stéréoscope justement intitulé *Cosmorama*. Il s'agit d'un meuble stéréoscopique permettant de regarder des vues mais également de les ranger et de les organiser en série afin de passer d'une vue à l'autre par l'intermédiaire d'un bouton d'actionnement et sans avoir à quitter les œilletons. Dans le commentaire, la vision fait l'épreuve d'un véritable déplacement ; l'image a disparu et c'est le pays lui-même que le commentateur semble voir et parcourir, s'émerveillant de l'exactitude ainsi que de la précision du détail :

> *[…] le voyage se fait sans qu'on quitte ni maison ni famille […] le cosmorama stéréoscopique […] apporte tous les pays sous sa robe d'acajou, et permet le spectacle dans un fauteuil. Vous vouliez voir l'Egypte, elle est là tout entière ! […] on s'imagine être transporté dans les pays que l'on a devant soi ; on suit les sentiers, on gravit les montagnes, on se mire dans l'eau des lacs, on croit sentir craquer sous ses pas cette neige représentée avec une perfection qui est un trompe l'œil, […] l'illusion est complète, c'est une féérie où l'art s'oublie, parce qu'il est devenu la nature.*[13]

L'engagement du corps du spectateur dans la pratique stéréoscopique du voyage immobile apparaît d'autant plus manifeste qu'une vue datant de 1900 en appelle explicitement à l'adéquation du corps de l'observateur à la représentation (fig. 87). En effet, la vue inclinée d'un des grands arbres du parc Stanley de Vancouver comporte une légende invitant l'utilisateur du stéréoscope à incliner la tête, et de ce fait l'appareillage lui-même, de telle sorte qu'il réalise le geste qu'il ferait en réalité au pied de l'arbre : « Throw your head back and look up one of the Big Trees, Stanley Park, Vancouver », indique la légende. D'après nous, cette vue contient en puissance les caractéristiques d'une mobilisation accrue du corps dans la fantasmagorie du voyage immobile autour de 1900. En effet, à l'illusion du voyage caractérisée par la vue des lointains s'ajoutent l'illusion et la sensation du transport.

Ainsi envisagée, la photographie énonce déjà les contours d'un spectateur caractérisé par une posture paradoxale comprise entre immobilité et mobilité. Entre la photographie et les spectacles, on retrouve, depuis le milieu du 19^{e} siècle, les expressions de « voyage immobile », de « voyage en salon », de « voyage sans dérangement », de « voyage en fauteuil, au coin du feu », de « voyage sur place », ou encore de « voyage en pantoufles ». Cette mobilité déjà toute machinique avec la photographie sera par la suite redoublée d'une sensation de mouvement, machinique elle aussi, et ce notamment à travers les attractions des Expositions universelles.

De telles expositions, et cela vaut pour Paris 1900, aux côtés du rôle dévolu à l'exposition des marchandises et de l'industrie, arborent les traits d'un immense voyage immobile. C'est avec une exactitude toute photographique que Paris 1900 se présente comme un voyage sur place. L'Exposition met le monde à portée du regard et de la main, elle l'offre au plaisir de la promenade, elle dessine un « monde en portefeuille », elle caractérise une mainmise qui, faut-il le rappeler, arrange admirablement les accords enjolivant du colonialisme. Les danses étrangères, les pavillons nationaux, leurs cuisines, leurs artisanats, leurs théâtres, donnent aux visiteurs le sentiment d'être ailleurs tout en demeurant au cœur de de la capitale. En effet, quels cas plus significatifs d'un engagement du corps dans l'expérience du voyage immobile que les Expositions universelles ? Tant d'une manière générale qu'en regard de ses attractions, l'Exposition de Paris en 1900 constitue une source intarissable d'exemples concernant le voyage immobile dans toute sa dimension fantasmagorique. Paul Morand signale en effet le rôle que joue l'imaginaire du voyage dans la transfiguration de la marchandise et du travail :

> *Les marchandises étaient dissimulées sous des spectacles exotiques, fériques, lumineux ; la danse du ventre faisait oublier la statistique. La production en grande série, qui naissait, mêlait d'ailleurs sa poésie aux prestiges de l'art : le labeur de la mine se transformait en une promenade en wagonnets ; de tant d'expéditions coloniales, si souvent désastreuses, il ne restait que l'enchantement des mosquées, des minarets, le bariolage de toutes les races de la terre, conquises, assujetties à la loi du Blanc.*[14]

Si l'on en croit Jules Claretie, Paris 1900 comble un besoin de voyage profondément moderne ; trois ans plus tôt il affirmait d'ailleurs que le siècle à venir « serait surtout celui des voyages et des voyageurs ».[15] Ce besoin de voyage, que l'auteur tient pour un symptôme de la nervosité moderne, correspond selon lui à une forme d'oubli volontaire, une fuite, le voyage est « une des formes de l'ivresse ».[16] Alors, Paris 1900 peut-apparaître comme une grande beuverie, une ambigüité de l'espace dirait Benjamin, une confusion des espaces et des temps néanmoins réunis sous la coupe d'un grand marché commun. Ainsi, pour Jean Lorrain, cette exposition a tout de la vision d'un halluciné : « C'est le tohu-bohu architectural d'un rêve de fumeur d'opium ; tous les styles, toutes les époques ont entassé là, sur les bords du fleuve, des spécimens de monuments hétéroclites, fastueux et bizarres ».[17] Claretie, l'opium en moins, semble dire la même chose lorsqu'il affirme qu'une fois sortie de l'exposition, de ce qu'il appelle ces « visions de mondes ignorés [et ces] illusions de voyages aux pays lointains », on s'étonne d'être ici, en France : « Un voyage autour des Palais vaut toutes les excursions du monde. Si loin, on est si loin, si loin de tout ce tertre fantastique et l'on est stupéfait, en en sortant, de se retrouver dans les jardins de France ! ».[18] Le registre de la fantasmagorie infuse le discours de Gustave Babin qui considère que Paris 1900 relève du rêve : « […] en passant d'une hutte de paille à un kiosque de cèdre peint, en frôlant un rébarbatif cactus, [les visiteurs] ont la sensation vive de quelque voyage lointain et précipité, *agréable comme un rêve*, en des contrées insoupçonnées ».[19] Outre le propos des commentateurs de l'Exposition, la brochure de la Société des Voyages Duchemin pour un séjour à l'Exposition universelle de Paris affirme que « [l]e voyageur fera en quelque sorte, dans un coin magnifique de Paris, le parcours de l'Univers ». L'ensemble de ces considérations est sans compter le soutien d'un nombre important d'attractions dont le voyage immobile constitue le dénominateur commun. Nous pensons à une attraction monumentale comme celle du *Maréorama* qui cherche à produire, comme l'atteste l'affiche, « l'illusion complète d'un voyage en mer », ce par le biais d'un tangage mécanique, du déroulement progressif de toiles latérales ou encore de la diffusion d'embrun. Il s'agit là d'une attraction « multisensorielle »[20] pour laquelle un rédacteur du *Figaro* évoque justement une fantasmagorie du « voyage sans dérangement ».[21] Une autre attraction panoramique, celle du *Panorama Transsibérien*, fait vivre au visiteur, installé dans un train animé de quelques agitations devant une toile mobile, le trajet Moscou-Pékin. Entré du côté du pavillon Russe, le voyageur ressort, trente minutes plus tard, dans les jardins attenants du pavillon de la Chine. Le projet du *Cinéorama*, quant à lui, installe les spectateurs au sein de la nacelle d'un ballon qui tient lieu de plateforme centrale et reproduit sur la paroi circulaire intérieure du bâtiment, au moyen d'une dizaine de projecteurs cinématographiques, l'ascension en ballon puis le survol ainsi que la visite de plusieurs capitales européennes. Enfin, cantonné à la représentation des contrées françaises, le spectacle cinématographique de l'attraction des *Voyages Animés* ne déroge pas à la tendance générale.[22] Le dispositif est somme toute plus modeste que ceux du *Cinéorama* et du *Maréorama*. L'attraction des *Voyages Animés* consiste en une programmation quotidienne thématique autour d'une région, par exemple la Savoie, la Champagne ou la Bretagne, chaque projection étant accompagnée d'un orchestre dissimulé à la vue du spectateur et du boniment d'une diseuse, jouant et chantant les musiques et chants respectifs des régions représentées. On ne manquera pas de parler alors d'« illusion géographique »[23] et d'inciter les parisiens privés de vacances d'aller s'y abreuver de voyages sans fatigue :

> *Nous voici à l'époque des vacances ; combien désireraient pouvoir faire un voyage, qui ne peuvent s'absenter. Leur rêve cependant peut se réaliser à l'Exposition, près du pont d'Iéna, aux Voyages animés où, sans fatigue, ils visiteront la Savoie, Chamonix et la mer de glace, le Dauphiné et la Grande-Chartreuse, les Vosges et la Champagne, l'Auvergne, Lourdes et les Pyrénées, Nice et la Côte d'Azur, la Bretagne et le mont Saint-Michel […].*[24]

Outre ces attractions clairement ancrées dans la tradition des spectacles panoramiques et/ou cinématographiques, la *Venise à Paris* ainsi que le *Village Suisse* se présentent comme des recréations sur place et en miniature d'un autre lieu, une simulation des lointains, avec ses journaux, ses commerces, ses habitations, ses animaux, sa langue, sa cuisine, ses spectacles. De telles attractions, sont, affirme Michel Corday en 1900, « des morceaux de territoire transportés dans l'Exposition ». Consistant en une reconstitution grandeur nature d'un ailleurs, ou en une illusion du voyage à l'aide d'un dispositif panoramique ou cinématographique, ces attractions font encore dire à Corday : « Grâce à elles, on pourra, en peu d'heures, vivre beaucoup de temps ; en peu de pas, parcourir beaucoup d'espace ».[25]

D'après Christophe Prochasson, « ces reconstitutions […] devaient susciter l'estrangement »,[26] soit le sentiment contradictoire d'être en même temps ici et ailleurs, la sensation qu'un autre lieu s'est résolument substitué, pour un temps, au lieu initial. Mais cette forme de l'estrangement, cette manière de dislocation, a pour corollaire, toujours au sein des Expositions, une autre forme de l'aliénation qui entretient cette fois-ci un rapport plus direct, plus frontal, avec la machine elle-même, tandis que celle-ci tendait à être dissimulée dans les attractions susmentionnées. En effet, outre un imaginaire visuel et discursif, le voyage immobile comporte une réalité technique tangible. C'est qu'il est aussi une question de transport, une manière d'être bougé par la machine.

Parlant d'une « fête du capital »[27] à propos l'exposition des machines, Rancière et Vaudray évoquent l'Expo de 1867 dans des termes qui peuvent s'appliquer à l'ensemble des expositions, et notamment celle de 1900. Les machines sont en effet exposées glorieusement comme avatar du patronat, elles tiennent en respect l'ensemble des visiteurs. Cette fête est le « spectacle d'une dépossession ».[28] Autrement dit, elle arrange les mises en scène aveuglantes d'un transfert d'autonomie de l'homme vers la machine. C'est alors Marx qu'il faut avoir en tête, lui pour qui l'aliénation dans le rapport de l'homme à la machine s'exprime dans les termes du dessaisissement, de la dépossession, voire du dépouillement. Ce dont il est question, c'est bien d'un transfert, d'une perte, d'un changement de nature, qui concernent l'homme soumis au mouvement du grand automate, l'individu dont les capacités de mouvement et de réflexion sont désormais déterminées par cet organe étranger qu'est la machine. Benjamin a justement envisagé, au sein des Expositions, l'aliénation à l'œuvre dans un tel rapport de proximité entre l'homme et l'industrie. Pour Benjamin, l'homme intègre la fantasmagorie des Expositions universelles pour se distraire et l'industrie du divertissement l'y aide en l'élevant au rang de marchandise, ainsi : « Il s'abandonne aux manipulations de cette industrie grâce à la jouissance que lui procure son aliénation […] ».[29] Dans le prolongement de l'exposition des machines envisagée sous l'angle d'un spectacle d'une dépossession, entre jouissance et aliénation, il nous faut parler d'une spectacularisation de la dépossession, à la fois pour signaler le cadre général d'une mise en scène de la technique, mais également pour suggérer une transformation dans le mode d'exposition des machines. Car si dans un premier temps ce qui se donne en spectacle c'est, sous la forme de l'exposition de l'automate, la machine en fonctionnement comme source de fascination, par la suite, à travers le rapport même du corps à la machine ce qui se donne en spectacle, c'est la machine en fonctionnement comme source de sensation.[30] Si l'attraction du premier mode, qui s'exprime au sein des galeries des machines de chaque Exposition, se joue dans la distance, la proximité sensationnelle caractérise le second.

Il faut alors se tourner vers l'exposition des moyens de transports, par exemple les ponts roulants, les trottoirs roulants, les ascenseurs, qui produisent, si l'on en croit les commentateurs, l'étrange sensation, d'une part d'être bougé, mu par une forcé étrangère, d'autre part que tout autour de soi est en mouvement tandis que l'on demeure soi-même immobile. Cela consiste donc à considérer de telles machines comme autant d'expériences visuelles et sensationnelles favorisées par la technique moderne, comme d'immenses « machines de vision », selon l'acception d'Olivier Lugon.[31]

La Tour Eiffel en est un exemple. En effet, l'attraction qu'elle suscite – qui se prolonge jusqu'en 1900 – ne repose pas uniquement sur son imposante structure métallique qui nécessite de la distance pour être appréciée, mais également sur le parcours du monument pouvant être réalisé au moyen d'ascenseurs (fig. 88). Ces ascenseurs, qui ont fait l'objet d'un grand nombre d'articles de vulgarisation technique, et dont les schémas ne sont pas sans évoquer quelque posture spectatorielle, sont l'affaire, outre d'une commodité, d'un plaisir visuel qui se joue entre mobilité et immobilité. C'est notamment ce que souligne le commentaire de Lenôtre en 1889 :

> *Les voyageurs se tiennent debout, le visage collé aux étroites fenêtres vitrées qui éclairent la cabine ; l'impression est singulière. Il semble que vous ne bougez plus, et tout, autour de vous, s'effondre dans un lointain vertigineux : les énormes poutres de fer de la cage métallique au travers de laquelle nous voyageons verticalement, se font plus légères et plus ténues ; et, à travers ce grillage, le paysage s'enfonce, se noie, s'enveloppe d'une teinte générale où les détails disparaissent.*[32]

La Tour Eiffel se fait expérience visuelle singulière, elle relève ici de la production machinique de la perception, tout du moins engage-t-elle un point de vue autre et techniquement induit. Entre mobilité et immobilité, la transformation de la perception s'élabore à l'aune d'une dépossession de la motricité humaine par la machine, de telle sorte que le corps est davantage mis en mouvement qu'il ne se meut de lui-même. Par conséquent, Lenôtre fait ici l'épreuve d'une (im)mobilité problématique voire contradictoire mais néanmoins productrice de sensations nouvelles.

Au mouvement ascendant de l'ascenseur correspond le déplacement latéral du trottoir roulant. Considéré comme l'un des clous de Paris 1900, la plateforme mobile, construite pour promener le visiteur à travers l'Exposition, fut plus qu'un simple moyen de transport mécanisé, le trottoir fut aussi une source de plaisir corporel et visuel, un moyen de faire l'épreuve d'une motricité machinée, pour ne pas dire électrisée. En ce sens, une chanson de 1900 intitulée *Le trottoir roulant* évoque l'idée d'un corps marché puisque l'une des paroles affirme : « C'est plus nous qu'on marche à présent ». De même, un dialogue comique du journal *La lanterne* évoque « un trottoir qui s'trotte tout seul sous vos pieds sans qu'on ait besoin de s'ballader d'ssus […] un trottoir où qu'on est roulé sans s'fatiguer ».[33] Outre la figure d'un corps marché par la machine – un corps qui est en même temps un corps-marché à disposition du capital dans le cadre des Expositions –, c'est le commentaire de Lorrain qui est ici déterminant. L'expérience de la plateforme y apparaît à la jonction de la perception visuelle et de la sensation corporelle. Le plaisir est celui du mouvement perçu et du mouvement ressenti. S'y dessine les contours d'un corps (im)mobile, s'y fait jour la jouissance d'une motricité paradoxale :

> *Un charme, un bien-être et une gaieté des yeux qu'une heure passée sur ce trottoir roulant. […] dans les branchages et les feuillages tendres des hêtres du quai d'Orsay, l'exode devient délicieuse, et cela sera certes un des clous de l'Exposition que cette sensation d'immobilité dans la vitesse […]. Pendant que les groupes en extase se laissent emporter, appuyés aux rampes, c'est un défilé d'architecture sculptées et peintes, […] de tours dorées comme celles de l'Allemagne, de loggias comme celles de Monaco […]. Tout cela se succède dans un désordre apparent mais voulu […].*[34]

Au regard d'un tel défilé et de l'imaginaire panoramique qui lui est rattaché, ni les ascenseurs de la Tour, ni le trottoir roulant n'auront échappé à l'œil du cinématographe. Néanmoins, à l'inverse, le cinématographe aura lui-même succombé à la mobilité de ces machines – machine². Le trottoir roulant constitue un passage obligé du cinématographe, en témoigne le corpus de films Edison, Lumière, Pathé et Méliès qui lui sont consacrés dans le cadre des vues concernant l'Exposition universelle de Paris en 1900.[35] En effet, tous ont réalisé des vues du trottoir roulant, mais aussi des vues *depuis* le trottoir roulant. Cette distinction apparaît dès le titre des deux films Edison : *Panorama of the Moving Boardwalk* (Edison, 1900) et *Panorama from the Moving Boardwalk* (Edison, 1900) (fig. 89). Elle intervient également chez Méliès. La description du film *Le Trottoir roulant* (Méliès, 1900) s'oppose aux trois films *Panorama pris du Trottoir roulant* (Méliès, 1900).[36] Ainsi, le premier film se caractérise par une vue « prise d'en bas, [et montre] le détail des charpentes supportant la plate-forme, les visiteurs glissant au-dessus, et le va et vient des voitures, omnibus, passants, etc. en dessous ».[37] Quant aux trois autre films, le point de vue apparaît être pris depuis la plateforme elle-même puisque la description fait immédiatement intervenir le défilement (« On voit défiler… ») et commence par « Panorama mouvant pris du trottoir roulant ».[38] De leur côté, les vues Lumière insistent davantage sur l'affluence des visiteurs installés sur le trottoir. Dans les trois films *Vue prise d'une plate-forme mobile* (Lumière, 1900) si la caméra se trouve effectivement sur l'attraction, elle se situe néanmoins sur la plateforme immobile et nous montre le flot continu des individus marchés par la machine passant d'un bord latéral à l'autre du cadre. Force est de constater que si le film ne constitue pas une vue panoramique en soi, s'il ne présente aucun défilement qui serait le fait d'un déplacement de la caméra elle-même, il n'en rend pas moins visible des corps défilés, des corps automates qui, à l'instar d'un défilé militaire, sont animés et mettent en œuvre à travers la marche les logiques d'un mouvement étranger. Un autre film Lumière, *Plate-forme mobile et train électrique* (Lumière, 1900), nous montre cette fois-ci le défilement même du paysage urbain sous la poussée du trottoir. Quant à Pathé, la firme propose deux films concernant le trottoir roulant qui, à l'instar d'Edison, oppose au *Trottoir roulant en marche* (Pathé, 1900) le *Panorama pris du Trottoir roulant en marche* (Pathé, 1900).

À travers le traveling induit par le déplacement de la plateforme mobile, le cinématographe rejoue par mimétisme la mobilité paradoxale de l'utilisateur du trottoir ou de l'ascenseur. Autrement dit, ces films dont l'appareil de prise de vues apparaît lui-même bougé par la machine ne fantasment-ils pas, davantage que la reproduction/captation d'une chose, d'un évènement ou d'une situation, la transmission d'une expérience visuelle et corporelle liée au mouvement combiné de deux machines ? Ne rejouent-ils pas indirectement l'expérience rapportée par Jean Lorrain ou encore par Lenôtre ? Nous pouvons formuler l'hypothèse d'un corps du spectateur cinématographique soumis, à travers le redoublement du mouvement de la machine trottoir par celui du cinématographe, à l'emportement du trottoir ou de l'ascenseur. Ces films déterminent, à l'image du visiteur embarqué de l'Exposition, les contours théoriques d'un spectateur embarqué. Par là même, ils reportent sur le plan de l'expérience cinématographique le paradoxe d'une (im)mobilité spectatorielle. Celle-ci est également concernée par l'ascenseur de la Tour Eiffel.

On retrouve, concernant la Tour, la distinction à l'œuvre à propos du trottoir. Ainsi le film *La Tour Eiffel vue du Trocadéro* (Lumière, 1900) tourné lors de l'Exposition universelle se distingue-t-il, esthétiquement mais aussi de par le titre, du *Panorama pendant l'ascension de la Tour Eiffel* (Lumière, 1897) tourné trois ans plus tôt. De même, une vue Edison de la Tour depuis le palais du Trocadéro (*Eiffel Tower from Trocadero Palace*, Edison, 1900) se distingue à la fois du mouvement panoramique vertical de l'appareil qui, des pieds de la Tour jusqu'au sommet, rend compte de la hauteur de la construction sans jamais quitter le sol (*Panorama of Eiffel Tower*, Edison, 1900) – dans un mouvement similaire à *Panorama of Flatiron Building* (Biograph, 1903) –, et se distingue de la reproduction de l'ascension de la Tour caméra embarquée dans l'ascenseur (*Scene from the Elevator Ascending Eiffel Tower*, Edison, 1900) (fig. 90). La reproduction cinématographique prend ici des airs de simulation. À propos du film d'Edison tourné depuis la cabine ascendante, le catalogue rapporte la longueur du trajet de l'ascenseur à celle de la bande, parlant d'« un voyage de 200 pieds de long » (« *a trip 200 feet long* »), puis ne manque pas de souligner que le film « produit un effet des plus sensationnels ».[39]

L'hypothèse d'une mobilité spectatorielle ambivalente au contact de telles vues se précise à propos d'un autre film Edison tourné cette fois-ci à bord d'une automobile en marche. En effet, *Panoramic View of the Dewey Arch, New York City* (Edison, 1899) est l'occasion pour le catalogue d'affirmer quant à l'effet produit sur le spectateur que « [l]a caméra approchant, les spectateurs s'imaginent passer eux-mêmes sous l'arche et s'engager sur la cinquième avenue ».[40] De même, la description d'un film Pathé que fournit le catalogue postule l'incarnation spectatorielle d'un individu à bord d'un train dont la caméra constitue de fait l'équivalent perceptif. On retrouve ainsi, à propos de *Voyage dans un train* (Pathé, 1897-1899) la description suivante : « Cette vue donne l'illusion au spectateur de quelqu'un regardant par la portière d'un wagon et voyant se dérouler le paysage si accidenté compris entre Nogent et Joinville ».[41] La description d'un autre film Pathé renforce encore l'idée d'une représentation cinématographique placée sous le signe de la reproduction mimétique, soit la simulation d'une expérience, ici celle du voyage en train à nouveau – il s'agit d'un film homonyme, *Voyage dans un train*, daté cette fois-ci de 1896 : « La vue représente le panorama que l'on voit lorsque l'on voyage en chemin de fer, cette vue est tournée aux environs de Paris ».[42] L'exemple le plus éloquent est peut-être *A Trip to Pan American Exposition* (Edison, 1901) qui convie le spectateur cinématographique à la reproduction du parcours du site de l'Exposition universelle de Buffalo sur l'un des bateaux naviguant sur les eaux du canal aménagé pour l'événement (fig. 91). Le film, d'une dizaine de minutes environ, installe le spectateur à la place du visiteur, derrière le conducteur. Charles Musser écrit ainsi à propos de ce film qu'il « transforme le spectateur en voyageur en fauteuil ».[43] La description du film par la firme correspond à la description d'un voyage touristique insistant sur les différents points d'intérêt. Sans toutefois faire de différence entre le film du voyage à travers l'exposition et le voyage réel à travers l'exposition, le descriptif affirme : « The ride is a refreshing one with charming views at every turn ». C'est en décrivant la fin du film et l'arrivée du bateau aux abords des berges de la Vielle Venise que le résumé projette un spectateur : « one can imagine himself to be in reality floating through the old European city of canals ». Le film fantasme ainsi le lien entre le spectateur et le voyageur réel de l'Exposition. Le cinématographe redouble alors l'opération caractéristique des Expositions universelles, à savoir la fantasmagorie d'une ville-monde et donc l'illusion d'être effectivement dans les rues des grandes cités européennes. En d'autres termes, le spectateur de cinéma est ici projeté au sein de l'Exposition Pan-Américaine de Buffalo qui elle-même projette ses visiteurs au sein d'une multiplicité d'univers simulés.

Au regard des *phamtom ride shots*, ces panoramas cinématographiques pris « depuis » diverses machines en marche, c'est-à-dire soumis au mouvement *autre* de la machinerie, intègrent la convention du « *viewer as passenger* » énoncé par Charles Musser.[44] Ils participent également d'une attraction du mouvement cinématographique dont parle Gunning.[45] Néanmoins, l'attraction du mouvement, qui est d'abord rattachée au mouvement contenu dans l'image, concerne ici plus directement, par ce mouvement autre, invu, ce mobile étranger, la situation du corps du spectateur entre mobilité et immobilité, elle détermine donc une attraction du mouvement de l'image inséparable d'une sensation corporelle, même fantasmée.

Le cinématographe participe ainsi d'un imaginaire culturel du corps embarqué. De ce point de vue, au même titre que le trottoir roulant, il intervient dans les développements d'une culture visuelle et matérielle qui introduit le corps dans un rapport ambivalent à la motricité puisqu'il est davantage mis en mouvement ou marché par la machine ou la représentation qu'il ne se meut véritablement lui-même. Un tel imaginaire, dont Paris 1900 constitue un exemple édifiant, se situe comme nous l'avons vu à la croisée des discours, des images, de l'architecture et de la technique. Il engage, à travers l'idée de voyage immobile, une posture spectatorielle que le cinéma rejouera à de nombreuses reprises, y compris de manière critique au sein des avant-gardes artistiques et cinématographiques des années 1920.

L'on peut être frappé de la proximité qui émerge entre la culture spectaculaire fin-de-siècle et ce qu'il est convenu d'appeler les « nouveaux médias » qu'entourent notamment des notions comme celles d'immersion ou d'interactivité. Au contact de 1900, une publicité pour la réalité virtuelle énonçant la pratique sous l'angle d'un « voyage depuis [le] salon » n'en apparaît que plus surannée voire anachronique, et ce en un sens critique.[46] De même, les moyens de locomotion en tout genre sont autant de machines prétextes au mouvement du point de vue. Du train ou de la voiture jusqu'à la nacelle de l'attraction foraine, les machines mobiles constituent en effet, notamment sur le plan esthétique, des éléments récurrents de l'innovation audiovisuelle, et par conséquent en sont la contradiction même. Il en est ainsi des films du Cinerama, de ceux du projet du Sensorama, de la réalité virtuelle ainsi que des attractions cinématographiques des Disneyland à travers le monde ou du futuroscope en France (fig. 92), voire également des représentations offertes par la machine imaginaire d'un film comme *Brainstorm* (Douglas Trumbull, 1983). Tous ont cette particularité de prévision, d'anticipation du cinéma du futur, tous l'expriment en des termes qui sont ceux d'une culture visuelle type 1900. En ce sens, des relents du 19e siècle parcourent l'histoire de l'innovation technologique. D'après nous, l'immersion est en ce sens un produit de la domination de la répétition. Elle est peut-être moins ce que le corps éprouve que ce qu'on lui présuppose, que ce qu'on fantasme à son égard. Il faut donc déplacer le regard de l'immersion comme effet vers l'immersion comme production/consommation. Une historiographie critique constitue l'une des modalités d'une telle révélation, d'un tel dévoilement. Elle permet, d'une part, d'orienter les réflexions vers une compréhension de la fantasmagorie comme incarnation, autrement dit comme production de gestes et de comportements, et d'autre part d'en révéler les phénomènes de permanence comme un outil d'exploration des contradictions inhérentes à la nouveauté, voire au capitalisme de manière générale. L'élaboration de continuités critiques doit rendre évidente la dimension profondément archaïque des pratiques néomédiatiques. Elle rejoint de ce fait l'une des modalités critiques de la Théorie critique telle qu'énoncées par Horkheimer en appendice de son texte « Théorie traditionnelle et théorie critique », à savoir l'identification de contradictions comme moyen d'inversion ou de retournement des concepts dominants contre eux-mêmes.[47]

A travers la fantasmagorie du voyage immobile, la continuité critique reconnaît ici au corps une portée critique. Il s'agit moins du corps phénoménologique que du corps des archives, des corps contenus dans les archives de la distraction qu'il s'agit de retourner contre le présent, contre ce qui demeure sous l'apparence du changement. Car une critique de Paris 1900 ne vaut que parce que l'Exposition nous concerne aujourd'hui. Tel est le sens que nous attribuons à l'idée d'*actualité critique* de l'histoire. Ce n'est pas simplement la critique d'une actualité la plus immédiate, c'est une critique qui, par le biais de l'histoire, fait retour vers le présent, chargé du passé comme d'une puissance de révélation du visage suranné que masquent des termes comme ceux d'immersion ou d'interactivité.

Cela suppose une posture historiographique attentive aux continuités. Comme l'écrit Roger Chartier, « […] les ruptures fièrement revendiquées masquent des continuités méconnues ».[48] La continuité ne doit donc pas être comprise dans le sens de succession ou de progression, mais plutôt dans le sens de permanence ou de stagnation. Il faut donc élaborer des permanences destinée à intervenir comme les refoulés d'une discontinuité réflexe. L'enjeu n'est pas de substituer impérieusement une échelle de temps à l'autre ni un modèle à l'autre, mais de perturber l'apparence du cours naturel des choses, de venir fissurer les discours dominants, notamment concernant la nouveauté.

La continuité critique assume alors le rôle idiot de déployer la figure aberrante de la répétition, de la permanence, non comme constat mais comme outil. Il importe d'y croire à moitié car, bien évidemment, les contextes changent, de même pour les techniques employés et les hommes qui les inventent ; mais au chercheur raisonnable qui s'emploie systématiquement à rendre aux évènements et conjonctures leur caractère unique et authentique échappe alors, pour reprendre les termes de Braudel, une histoire « sous-jacente », une « histoire inconsciente », une « histoire profonde », qui en est parfois la contradiction-même, sinon le point aveugle.[49] En ce sens, une histoire critique nous semble pouvoir reprendre à son compte la situation énoncée Benjamin sous l'effet du haschisch : « […] je ne voyais que des nuances : mais elles étaient identiques ».[50]

Illustrations

87. Vue stéréoscopique (Underwood & Underwodd, 1900).
88. Schéma de l'ascenseur de la Tour Eiffel paru dans *La Science illustrée*, juin 1889, n° 79, et reproduit dans *Gazetophile*, n° 2, avril 2016.
89. Panorama from the moving boardwalk (Edison, 1900, source Library of Congress).
90. Scene from the elevator ascending Eiffel Tower (Edison, 1900, source Library of Congress).
91. A trip to Pan American Exposition (Edison, 1901, source Library of Congress).
92. Publicité pour le Futuroscope (2004, source INA).

Notes

[1] Citation de Karl Korsch dans Walter Benjamin, *Paris, capitale du XIXe siècle. Le livre des passages*, Cerf, Paris 1989, p. 677.

[2] Il importe d'énoncer ici un lien entre l'idéologie du progrès et la critique marxienne de la rhétorique de l'apparence naturelle du cours des choses caractérisant les discours de l'économie politique. Loin de s'en tenir au cadre de l'économie, cette naturalisation concerne de même le progrès technique et la manière dont il s'impose comme par nécessité, naturalisant de ce fait les processus d'aliénation qui lui sont rattachés.

[3] L'expression « leçon des choses » intervient à de nombreuses reprises dans les discours, notamment dans le guide Conty de l'Exposition universelle de Paris en 1900, cf. *L'Exposition de 1900. Renseignements pratiques sur Paris et l'Exposition*, Guides Conty, Paris 1900.

[4] Sur les origines littéraires d'un tel motif, cf. Bernd Stiegler, *Autour de ma chambre. Petite histoire du voyage immobile*, Hermann, Paris 2016 ; cf. également, Alison Byerly, *Are We There Yet ? Virtual Travel and Victorian Realism*, The University of Michigan Press, 2013.

[5] Cf. François Jarrige, « Machines en mouvement. Les ambivalences du spectacle technique dans les expositions universelles du Second Empire », dans A.-L. Carré et al. (sous la direction de), *Les Expositions universelles en France au XIXe siècle. Techniques. Publics. Patrimoines*, CNRS, Paris 2012 ; François Jarrige, *Techno-critiques. Du refus des machines à la contestation des technosciences*, La découverte, Paris 2014.

[6] Cf. Theodor W. Adorno, Max Horkheimer, *La Dialectique de la raison*, Gallimard, Paris 1974. Pour une proposition théorique actuelle autour du concept de *Kulturindustrie* formulé par les auteurs de l'Ecole de Francfort, nous renvoyons au travail d'Alexander Neumann, « *Kulturindustrie* : l'industrie de la culture en tant que modèle critique », *Variations. Revue internationale de théorie critique*, n° 21, 2018, https://journals.openedition.org/variations/901, dernier accès 11 novembre 2018.

[7] Louis de Cormenin, « Egypte, Palestine, Nubie et Syrie. Dessins photographiques par Maxime Du Camp », dans *Lumière*, 2ème année, n° 51-52, 1852, repris dans André Rouillé (ed.), *La Photographie en France. Textes et controverses : une anthologie. 1816-1871*, Macula, Paris 1989.

[8] Louis Figuier, *La Photographie au Salon de 1859*, Hachette, Paris 1860.

[9] Edouard Guinand, « Stances en l'honneur de Daguerre », dans *Le Bulletin de la société française de photographie*, 1897, p. 332.

[10] Oliver W. Holmes, « Un Voyage stéréoscopique » (1861), traduit de l'anglais par François Brunet, *Etudes photographiques*, n° 9, 2001, https://journals.openedition.org/etudesphotographiques/245, dernier accès 11 novembre 2018.

[11] L'hypothèse d'une déambulation par l'intermédiaire de la photographie stéréoscopique intervient notamment dans l'article de Rosalind Krauss, « Les espaces discursifs de la photographie », dans *Le Photographique. Pour une théorie des écarts*, Macula, Paris 1990.

[12] Jacques Babinet, « Le stéréoscope et la vision binoculaire », dans *La Revue des deux mondes*, Juillet 1853, p. 384 (c'est moi qui souligne).

[13] Dans *Le Journal amusant*, n° 327, 5 Avril 1862.

[14] Paul Morand, *1900* (1931), Flammarion, Paris 1941 (nouvelle édition), p. 65.

[15] Jules Claretie, *La Vie à Paris. 1897*, Eugène Fasquelle, Paris 1898.

[16] « Ah ! les pauvres gens que nous sommes ! Il nous faut nous enivrer pour oublier, et le voyage est une des formes de l'ivresse », écrit Jules Claretie dans le journal *Le Temps* du 15 août 1895.

[17] Jean Lorrain, *Mes expositions universelles (1889-1900)*, édition établie, annotée, présentée par Philippe Martin-Lau, éditions Champion, Paris 2002, p. 182.

[18] Jules Claretie, *La Vie à Paris. 1900*, Eugène Fasquelle, Paris 1901, pp. 122-123.

[19] Gustave Babin, *Après faillite. Souvenir de l'exposition de 1900*, Dujaric & Cie, Paris 1902, p. 260 (c'est moi qui souligne).

[20] Cf. Sonsoles Hernandez Barbosa, « The 1900 world's fair or the attraction of the senses. The case of the *Maréorama* », dans *The Senses and Society*, vol. 10, n° 1, 2015 ; voir également les pages concernant le Maréorama dans l'ouvrage d'Erkki Huhtamo, *Illusions in Motion. Media Archaeology of the Moving Panorama and Related Spectacles*, MIT Press, Cambridge (MA) 2013.

[21] Henry de Trêves, « Un voyage maritime dans Paris », dans *Le Figaro*, 8 janvier 1899. En effet, l'attraction de destine, d'après l'auteur, au « casanier d'essence particulière, qui rêve d'expéditions lointaines et de cieux inconnus, qui serait prêt à accomplir les plus difficiles trajets… s'il ne fallait pas se déranger pour cela ».

[22] La présence du cinématographe à l'Exposition universelle de Paris en 1900 a été analysée dans le détail par Emmanuelle Toulet, « Le cinéma à l'Exposition universelle de 1900 », dans *Revue d'histoire moderne et contemporaine*, vol. XXXIII, avril-juin 1986.

[23] Michel Corday, « A l'exposition. Visions lointaines », dans *La revue de Paris*, mars 1900, p. 437.

[24] Dans *Le Figaro*, n° 212, 31 juillet 1900.

[25] Michel Corday, « A l'exposition. Visions lointaines », cit.

[26] Christophe Prochasson, *Paris 1900. Essai d'histoire culturelle*, Calmann-Lévy, Paris 1999, p. 103.

[27] Jacques Rancière, Patrick Vauday, « En allant à l'expo : l'ouvrier, sa femme et les machines », dans Jacques Rancière, *Les Scènes du peuple (Les révoltes logiques, 1975-1985)*, Horlieu, Lyon 2003, p. 65.

[28] *Ibidem.*

[29] Walter Benjamin, *Paris, capitale du XIXe siècle*, cit., p. 39.

[30] Le développement des attractions mécaniques sur les champs de foire autour de 1900 constitue un exemple particulièrement éclairant d'un plaisir corporel inédit lié aux machines. Georges Vigarello a justement insisté sur l'importance de la machine au tournant du siècle dans le cadre d'une découverte de sensations, dans *Le Sentiment de soi. Histoire de la perception du corps*, Seuil, Paris 2014.

[31] Cf. Olivier Lugon, « Le vieux pont, l'historien et le nouveau photographe », dans François Bon, Olivier Lugon, Philippe Simay, *Le Pont transbordeur de Marseille Moholy-Nagy*, INHA/Ophrys, Paris 2013.

[32] G. Lenôtre, « Un voyage à la Tour Eiffel », dans *Le Petit moniteur illustré*, 5ème année, n° 42, 1889, repris dans *Gazetophile. Presses Illustrée – XVIIIe, XIXe, Belle Epoque & Années folles*, n° 2, avril 2016.

[33] Bobêche, « Le Trottoir Roulant », dans *La lanterne*, 26 avril 1900.

[34] Jean Lorrain, *Mes expositions universelles (1889-1900)*, cit., p. 200.

[35] Jacques Malthête, « Les *Vues spéciales de l'Exposition de 1900*, tournées par Georges Méliès », dans *1895. Mille huit cent quatre-vingt-quinze*, n° 36, 2002. Dans ce texte, l'auteur présente

des documents qui attestent les films tournés par Méliès lors de Paris 1900, et fournit en supplément au lecteur des extraits des catalogues des firmes Edison, Lumière et Pathé qui rendent compte des attractions soulignées par chacune, notamment le trottoir roulant.

[36] Les titres des trois films sont : *Panorama pris du Trottoir roulant. Le Champ-de-Mars* ; *Panorama pris du Trottoir roulant. La Place des Invalides* ; *Panorama pris du Trottoir roulant. La Rue des Nations*.

[37] Cité dans Jacques Malthête, « Les *Vues spéciales de l'Exposition de 1900*, tournées par Georges Méliès », cit.

[38] *Ibidem.*

[39] Cité dans Charles Musser, *Edison Motion Pictures, 1890-1900: an annoted filmography*, Smithsonian Institution Press, Washington 1997, p. 607, (c'est moi qui traduit).

[40] *Idem*, pp. 569-570, (c'est moi qui traduit).

[41] Cité dans Henri Bousquet, *Catalogue Pathé des années 1896 à 1914*, Henri Bousquet, 1993, p. 846.

[42] *Idem*, p. 841. Entre autres cas cinématographiques de machine², la catalogue Pathé comporte notamment une ascension ainsi qu'une descente de la Grande Roue de Paris.

[43] Charles Musser, *The Emergence of Cinema. The American Screen to 1907*, University of California Press, Berkeley 1990, p. 319, (c'est moi qui traduit).

[44] Le *viewer as passenger convention* ne fait pas, chez Musser, l'objet d'une formulation théorique élaborée mais se retrouve ici et là au contact de films et d'attractions manifestes dans leur volonté de transmettre au spectateur la sensation du voyage. Cf. Charles Musser, *The Emergence of Cinema*, cit. ; Charles Musser, *Before the Nickelodeon. Edwin S. Porter and the Edison Manufacturing Company*, University of California Press, Berkeley 1991 ; Charles Musser, « The Travel Genre in 1903-1904. Moving Towards Fictional Narrative », dans Thomas Elsaesser (sous la direcrion de), *Early cinema. Space, frame, narrative*, British Film Institue, London 1990. L'hypothèse d'un spectateur cinématographique voyageur intervient également dans l'ouvrage de Giuliana Bruno, *Atlas of Emotion. Journeys in Art, Architecture, and Film*, Verso, New York 2002. Nous renvoyons également à l'ouvrage dirigé par Jeffrey Ruoff au sein duquel l'auteur évoque le cinéma dans les termes d'un « véhicule audiovisuel », Jeffrey Ruoff (sous la direcrion de), *Virtual Voyages : Cinema and Travel*, Duke University Press, Durham 2006.

[45] Cf. Tom Gunning, « The Attraction of Motion : Modern Representation and the Image of Movement », dans Annemone Ligensa, Kraus Kreimeier (sous la direcrion de), *Film 1900 : technology, perception, culture*, John Libbey Publishing, 2009.

[46] Il s'agit là d'une publicité pour un système de réalité virtuelle de la firme Samsung datant de 2016. A l'occasion des fêtes de fin d'année la publicité indique : « Plus que la réalité virtuelle, offre un voyage depuis votre salon ». De même, une publicité récente intitulée « Open Your Eyes » pour l'appareil de réalité virtuelle Occulus Go fait appel à la grammaire visuelle du travelogue.

[47] Cf. Max Horkheimer, « Appendice » (1937), dans *Théorie traditionnelle et théorie critique*, Gallimard, Paris 1970. Les auteurs de la Théorie critique – ainsi que d'autres gravitant autour d'elle comme Ernst Bloch – se sont attachés, dans le prolongement de Marx, à pointer les contradictions du capitalisme. C'est, au fond, le capitalisme lui-même qui apparaît comme une puissance contradictoire. En effet, il se situe à l'orée du changement permanent et du maintien de l'ordre existant. Il ne révolutionne ses moyens de production et de consommation, et par là même il modifie les structures sociales, que parce que cela lui permet de demeurer et de maintenir un système quasi intact. Il y a donc, derrière l'apparence du changement, le visage du même. Il en est ainsi, d'après nous, des gesticulations de l'industrie culturelle à travers l'histoire dès son émergence au tournant du siècle. De ce point de vue, il est une actualité de 1900 dont nous entendons mener l'exercice.

[48] Roger Chartier, *Au bord de la falaise. L'histoire entre certitudes et inquiétudes*, Albin Michel, Paris 1998, p. 15.

[49] Pour l'ensemble de ces expressions nous renvoyons aux textes de Fernand Braudel concernant la longue durée réunis dans Fernand Braudel, *Écrits sur l'histoire*, Flammarion, Paris 1969 ; et *Écrits sur l'histoire. II*, Arthaud, Paris 1990.

[50] Walter Benjamin, « Haschich à Marseille » (1932), dans *Œuvres II*, Gallimard, Paris 2000, pp. 55-56.

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Histoire exposée, bonheur de l'humanité. De quelques fantasmagories photo-cinématographiques

En 2003, l'UNESCO inscrit *The Family of Man*, le grand œuvre photographique d'Edward Steichen, au sein de son programme *Mémoire du monde*. Si l'on en croit la petite notice explicative de ce programme, l'exposition du photographe américain « répond […] aux critères de sélection en ce qui concerne son intérêt international et sa valeur universelle exceptionnelle ».[1] Je propose de revenir sur cet événement culturel majeur du 20e siècle en Occident et de sa réception critique en France et aux États-Unis pour mener une réflexion sur le caractère fantasmagorique de ce type de manifestation. La désignation de *The Family of Man* comme fantasmagorie procède d'un double mouvement théorique qui s'appuie dans une large mesure sur la conception benjaminienne présentée par Édouard Arnoldy dans son texte introductif : premièrement, il s'agit de révéler (et critiquer) son caractère illusoire, chimérique ; dans un second temps, l'enjeu est de déceler la ou les façon(s) dont la fantasmagorie se retourne contre elle-même, puisqu'elle « s'avère capable de révéler *la vérité* de son caractère illusoire ».[2] Pour autant, la fantasmagorie ne se retourne pas toute seule contre elle-même : c'est à l'historien matérialiste, suivant Tackels, de repérer ce que dissimule toute entreprise fantasmagorique. Dans cette perspective, la réflexion que je propose ici ne se contentera pas de la simple étude de cas, car opérera un détour par le 19e siècle et ses Grandes expositions, lesquelles seront considérées comme le terreau d'entreprises telles que celle portée par Edward Steichen au milieu du siècle suivant. Si ce choix méthodologique s'impose, c'est qu'un va-et-vient entre différentes époques permet d'amorcer une critique de l'histoire linéaire, porte drapeau du Progrès. En effet, malgré le devenir-art de la photographie et du cinéma, tout particulièrement dans les années 1920, certains usages des médias photographiques font bégayer une singulière conception de l'humanité, prétendument unifiée, et désamorcent toute critique qui désignerait les écarts profonds, les injustices ou les hiérarchies sociales qui font l'inégalité des hommes et des femmes *dans l'histoire*. Ce faisant, je relèverai quelques stratégies propres à ces fantasmagories, prioritairement la suivante : la mise en avant des médias photographiques comme *témoins* idéaux, parfaitement objectifs, supérieurs à la parole humaine, laquelle se trouve étouffée, négligée, refoulée par la supposée infaillibilité mécanique.

Une précision s'impose ici : cette concurrence entre témoins humain et mécanique, qu'une telle présentation affiche de façon quelque peu schématique, témoigne d'une grande complexité depuis l'avènement du daguerréotype au milieu du 19e siècle. On ne saurait considérer la parole humaine comme exclusivement critique face à une image mécaniquement reproduite constamment au service des « vainqueurs ». Sur ce point, la critique incisive de l'histoire portée par Charles Péguy à l'aube du 20e siècle reste précieuse : il dénonçait alors le comportement du témoin historique, toujours prêt à répéter le récit d'une histoire « comme il faut ».[3] De même, nombre de pratiques artistiques et/ou amateurs ont pu engager un travail critique en photographie, en cinéma, etc., en éprouvant les spécificités de chaque médium. À une certaine conception du témoignage, considéré comme le garant d'une histoire « comme il faut », on opposera l'hypothèse d'un *témoignage critique*, qui fêle les grandes vérités établies. Pour penser cette opposition, l'exposition d'Edward Steichen est un point de départ privilégié.[4]

The Family of Man *: témoignage photographique d'une humanité homogénéisée*

C'est en 1955 que se tient au MoMA l'exposition *The Family of Man*, organisée par le directeur du département de la photographie de l'institution : Edward Steichen. Cinq cent trois photographies, prises par des photographes aussi bien amateurs que professionnels (deux cent soixante-treize, issus de soixante-huit pays, dont bon nombre de célébrités comme Henri Cartier-Bresson ou Dorothea Lange) y sont exposées. L'idée est la suivante : montrer le lien puissant qui unit l'ensemble de l'humanité, hommes femmes et enfants du monde entier partageant les mêmes joies, les mêmes craintes, les mêmes espoirs, les mêmes activités, etc. Selon Steichen, l'exposition a été « conçue comme un miroir où se réfléchit l'universalité des faits et des gestes qui président à la vie de tous les jours, comme un miroir de l'essentielle unité de l'homme à travers le monde […] ».[5] La visée d'une telle manifestation semble claire : homogénéiser l'humanité. Si le travail de Steichen relève les différences entre les peuples, entre les cultures, celles-ci restent des différences de surface. En effet, malgré ces écarts qui viennent signifier une certaine distinction entre les hommes, un même fond, une même essence les unit. L'humanité partage alors un destin commun. C'est ce qu'a mis en valeur Roland Barthes dans sa critique quasi immédiate de cet événement culturel. Désignant dans son texte le « mythe ambigu de la 'communauté' humaine », l'essayiste écrit :

> *Ce mythe fonctionne en deux temps : on affirme d'abord la différence des morphologies humaines, on surenchérit sur l'exotisme, on manifeste les infinies variations de l'espèce, la diversité des peaux, des crânes et des usages, on babelise à plaisir l'image du monde. Puis, de ce pluralisme, on tire magiquement une unité : l'homme naît, travaille, rit et meure partout de la même façon ; et s'il subsiste encore dans ses actes quelque particularité ethnique, on laisse du moins entendre qu'il y a au fond de chacun d'eux une « nature » identique, que leur diversité n'est que formelle et ne dément pas l'existence d'une matrice commune.*[6]

La critique de Barthes, particulièrement virulente, cible ce qui a été supprimé au sein de l'entreprise de Steichen :

> *[…] Le poids déterminant de l'histoire : nous sommes retenus à la surface d'une identité, empêchés par la sentimentalité même de pénétrer dans cette zone ultérieure des conduites humaines, là où l'aliénation historique introduit de ces « différences » que nous appellerons tout simplement ici des « injustices ».*[7]

Barthes oppose dans ce court texte être et *modes d'être* : face à l'idée d'essence humaine, l'essayiste rappelle l'existence de déterminants historiques qui règlent les activités humaines. Parmi les exemples issus de l'exposition, retenons l'universalité des rapports père/fils (fig. 93) : Noirs, Blancs, riches, pauvres, tout cela, en définitive, importe peu, un même *patrimoine affectif* unit les hommes. Retenons encore l'universalité et l'éternité du travail. L'exposition associe des « travailleurs » d'origines, de classes, d'âges différents. L'association vise à formuler l'idée d'une activité semblable, nécessaire et éternelle. Et dans le dispositif d'exposition, des proverbes et des citations (issus de folklores, d'ouvrages, de mythes du monde entier) renforcent le caractère éternel des situations présentées. Au sein du segment consacré au travail, un fragment issu de la *Bhagavat-Gita*, l'un des textes majeurs de l'hindouisme, affirme : « Si je ne travaillais pas, ces mondes s'effondreraient ».[8] C'est finalement contre cet agrégat d'images et de textes que la critique barthésienne s'impose : « que le travail soit un fait ancestral ne l'empêche nullement de rester un fait parfaitement historique »,[9] insiste l'essayiste.

L'enjeu, ici, n'est pas de nier totalement l'idée de ressemblance entre des hommes et des femmes de temps et de lieux fort différents. Sur bien des points, ce que nous dit l'humanisme de Steichen est difficilement contestable. Mais comme sont difficilement contestables les évidences qui frôlent la platitude : les humains naissent et meurent, chérissent leurs enfants, travaillent pour se nourrir, etc. Ce qui importe, c'est de relever ce que l'insistance de l'exposition sur ces ressemblances de surface cache *au plan idéologique*. Sur ce point, vingt ans après Barthes, le photographe américain Allan Sekula prolongera le point de vue de l'auteur de *Mythologies*, formulant une critique particulièrement incisive du projet de Steichen en l'étiquetant comme « abrégé du libéralisme américain de la guerre froide »,[10] dont l'horizon est « de figer la vie sociale [et] de la rendre invisible [...] ».[11] Sekula insiste : « *The Family of Man* universalise la famille nucléaire bourgeoise, évoquant un album de famille utopique et global, une romance familiale imposée à tous les coins de la planète ».[12] Ces penseurs et praticiens de la photographie sont des aides précieux pour alimenter une réflexion sur la fantasmagorie. C'est bien la magie qui opère selon Barthes, magie rendue possible par un certain usage de la photographie : « tout ici, contenu et photogénie des images, discours qui les justifie, vise à supprimer le poids déterminant de l'histoire ».[13] De son côté, Sekula définira *The Family of Man* comme « une entreprise massive et ostentatoirement bureaucratique d'*universalisation* du discours photographique ».[14]

De Steichen à Ruttmann : proximité des discours photo-cinématographiques

The Family of Man est une œuvre qui permet de penser les points de jonction entre photographie et cinéma. Nombre de commentateurs ont pu déceler la pensée cinématographique qui traverse le dispositif steichenien, au sein duquel le montage d'images photographiques détermine la vision humaniste du photographe américain.[15] Vingt-cinq ans plus tôt, une entreprise cinématographique développait une conception similaire de l'humanité, entreprise qui témoignait, on peut le supposer, d'une *universalisation du discours cinématographique*.[16] En 1929, dans *La Mélodie du monde*, Walter Ruttmann, alors à l'avant-garde des expérimentations visuelles et sonores (je n'insisterai pas ici sur l'importance de la dimension sonore du film, qui participe pleinement de ce processus d'homogénéisation du monde), propose une vision elle aussi humaniste de l'humanité, insistant dans son montage sur les rapprochements, les rimes, les correspondances qui désignent, sous la couche superficielle des différences, des écarts entre les hommes, un même fond commun. Parmi les exemples les plus frappants, je convoquerai un passage du film qui présente une Mère à l'enfant donnant le la d'une séquence (je file ici à dessein la métaphore symphonique), modèle et matrice de toutes les relations mère-enfant du monde (fig. 94). On notera la stratégie visant à naturaliser l'amour maternel par la convocation de plans d'animaux. Ici, la critique barthésienne, visant le religieux qui imprègne les discours entourant *The Family of Man* (discours chrétien, ce fait a nourri de nombreux commentaires depuis 1955), ainsi que l'éternité de certains phénomènes échappant à l'histoire, semble parfaitement valable. Et que dire de la vision du travail, elle aussi héroïsée, éternisée, désocialisée.

Dans son étude consacrée au film, Laurent Guido a rappelé son ancrage historique au sein d'un moment qui fantasme l'universalité, la réunion des peuples grâce aux capacités du médium cinématographique.[17] Écoutons ici sa traduction d'un fragment du carton introductif du film, lequel a pour projet d'« amplifier la compréhension des formes multiples de la vie humaine et de porter au niveau de la représentation le lien sous-jacent entre les êtres humains ».[18] Ce fantasme d'union universelle, qui caractérise nombre d'avant-gardes de l'époque, en passe par le modèle de la symphonie, qui est, comme le rappelle Guido, un « lieu commun des discours esthétiques sur le cinéma dans les années 1920 ».[19] Sur ce point, remarquons ici, pour conclure cette brève correspondance entre les œuvres de Ruttmann et de Steichen, que le modèle symphonique se trouve réinvesti dans les discours entourant *The Family of Man*, ce dont témoigne la une d'un numéro du *Courrier de l'UNESCO* paru en 1956 (fig. 95). Dans la forme de l'exposition, c'est notamment la présence répétée d'un joueur de flûte péruvien (fig. 96) qui vient donner une sorte de liant musical à l'exposition : présent en couverture du catalogue de l'exposition, les spectateurs (et les lecteurs du catalogue) le rencontrent à cinq reprises. Dans une émission de télévision diffusée en 1956, Steichen ne manque pas de calquer ce joueur de flûte sur un modèle : « le joueur de tuba dans une symphonie française ».[20]

La photographie comme témoin privilégié

La réactivation du paradigme symphonique renforce l'entreprise d'homogénéisation du monde à l'œuvre dans *The Family of Man*. Ce qui singularise cette exposition, et la désigne comme fantasmagorie, c'est ce voile d'homogénéité qui recouvre les réalités humaines, faites de disparités, d'écarts, de hiérarchies, d'injustices. Convoquant virtuellement les parents d'Emmet Till, adolescent noir torturé et assassiné dans l'État du Missisipi en 1955, Roland Barthes ironise : « mais pourquoi ne pas demander aux parents d'Emmet Till, le jeune nègre assassiné par des Blancs, ce qu'ils pensent, eux, de *la grande famille des hommes* ? ».[21] Chez Barthes, l'ironie se fait répétitive. À propos des ouvriers maghrébins présents quotidiennement au nord de Paris, il persiste : « demandons aussi aux travailleurs nord-africains de la Goutte-d'Or ce qu'ils en pensent de *la grande famille des hommes* ».[22]

Il faut prendre ici la mesure des exemples engagés par l'essayiste, qui convoque rien de moins que des *témoins potentiels* qui viendraient fendre, fêler, contrarier le discours globalisant, universalisant, éternisant de *The Family of Man*. À ces témoins contrariants, l'exposition et les discours qui l'entourent opposent un autre témoin : la photographie elle-même. Et l'on est sur le point de remarquer que la stratégie adoptée par ces manifestations est déjà grammaticale. Le singulier est toujours préféré au pluriel : *la* mélodie, *la* symphonie, *la* famille, *le* témoin. Si Barthes stigmatisait la photogénie des œuvres exposées, c'est qu'elle était le vecteur d'une communauté humaine somme toute illusoire. Cette photogénie, c'est bien elle qui est mise en avant par Carl Sandburg, dans son célèbre avant-propos, lorsqu'il fait du visage photographié le porteur d'une vérité que la parole humaine peine à approcher : « souvent un visage exprime ce que nulle parole ne saurait rendre ».[23] Ici, Sandburg inscrit sa réflexion dans le registre du conflit opposant le témoin mécanique au témoin humain. Ce faisant, il confirme en conclusion, dans un élan lyrique qui participe de la grande fantasmagorie steichenienne, ce rôle de témoin attribué à l'exposition photographique : « témoignage photographique [*camera testament*] du drame qui se joue dans les profondeurs du grand canon de l'humanité, épopée tissée de rires, de mystères et de sainteté – voici La Grande Famille des Hommes ! ».[24] L'emphase de cette conclusion correspond à la religiosité qui imprègne les discours entourant la manifestation. D'ailleurs, le texte original précise qu'il s'agit là d'un « *camera testament* » : la connotation religieuse est sensible dans cette idée du témoignage, et confirme la négation de toute complexité socioculturelle. Ici, une histoire homogène est portée par un discours photographique et péri-photographique qui peine à voiler son origine culturelle.

Trois ans après la première de *The Family of Man*, Edward Steichen publie un article au titre explicite : « Photography : Witness and Recorder of Humanity ».[25] Pour Steichen, dès que l'appareil est enclenché par celui qui le manipule, le processus mécanique permet d'obtenir un « document historique » qui vient « expliquer l'homme à l'homme ».[26] La photographie est ici un témoin enregistreur porteur d'un discours unificateur. Et si la qualité d'artiste du photographe est décisive, seul l'artiste photographe étant en mesure de « pénétrer sous la surface des choses »[27] (on retrouve l'essence, la nature, l'être visés par Steichen – critiqués par Barthes, qui y opposait les *modes d'être*), la qualité de témoin associée au médium vient dans la démarche du photographe et dans les discours qui l'entourent imposer une autorité, dévoilant un message qui ne saurait être remis en cause. Les références de Steichen sont, il convient de le rappeler, des lieux communs : le miroir et le témoin sont des paradigmes insistants pour penser la vérité photographique. Beaumont Newhall, créateur du département de la photographie du MoMA, en témoigne dans son ouvrage classique sur l'histoire de la photographie, à travers les titres de deux chapitres : *The Mirror with a Memory* (deuxième chapitre) et *The Faithfull Witness* (sixième chapitre).[28] Paradigmes insistants, il faut le souligner, qui se sont constitués dans la deuxième moitié du 19^{e} siècle, moment sur lequel je propose de revenir, car point d'origine de deux idées fondamentales qui se sont nouées à la charnière des deux derniers siècles : l'idée de famille des hommes et la considération des médias photographiques comme témoins d'une fidélité indéfectible.

Au 19e siècle, la famille humaine conviée aux Expositions universelles

En 1898, dans un texte qui peut être conçu comme le bilan d'un demi-siècle fasciné par le réalisme des images mécaniquement reproduites, le photographe et opérateur russo-polonais Boleslas Matuszewski propose de créer un dépôt de cinématographie historique. Pour asseoir son propos, il loue les qualités de témoin de tout document issu du nouveau médium, bien plus à même de dire l'histoire que le témoin humain :

> *On peut dire que la photographie animée a un caractère d'authenticité, d'exactitude, de précision qui n'appartient qu'à elle. Elle est par excellence le témoin oculaire véridique et infaillible. Elle peut contrôler la tradition orale et, si les témoins humains se contredisent sur un fait, les mettre d'accord en fermant la bouche à celui qu'elle dément.*[29]

Cette brochure obtient un grand succès : la presse relaie les principales idées de son auteur, et insiste tout particulièrement sur cette confrontation entre témoin mécanique et témoin humain, le premier surpassant le second sans discussion possible. Deux ans plus tard, le même Matuszewski est chargé d'organiser pour l'Exposition universelle parisienne la commémoration de la Conférence de la Paix tenue à La Haye en 1899. C'est le tsar Nicolas II qui est à l'origine de cette réunion visant à convier les dirigeants ou représentants des pays du monde entier (ou presque) afin de convenir de certaines règles : prioritairement stopper la course à l'armement qui fait alors l'actualité des nations, et ainsi éviter une guerre. Le journaliste anglais William T. Stead en publie la chronique en 1901. Dès la première page, une formule frappe : la ville hollandaise accueille rien de moins que le « parlement de la race humaine ».[30] Et c'est bien au nom des peuples et de leur bonheur que l'organisation d'une conférence se développe. L'auteur cite notamment une lettre du Premier ministre anglais au sein de laquelle, deux ans avant la tenue de la réunion, l'idée d'une conférence de la Paix prend véritablement forme : il y est question d'une « Constitution internationale donnant au monde comme résultat de leur grande force une longue ère de relations dégagées de toute entrave, de commerce prospère et de paix continue ».[31]
Notons l'ordre des priorités : le commerce prospère précède ici la paix continue. Le libre échange conditionne l'entente mondiale. Cette perspective, fort résumée ici, trouve son ancrage dans la première Exposition universelle, organisée à Londres en 1851. Et c'est bien la « grande famille des hommes »[32] que va mettre en valeur la capitale anglaise. Sur ce point, dans son ouvrage consacré aux fantasmagories modernes et postmodernes, Marc Berdet rappelle quelques propos tenus en marge de l'événement :

> *Pour [l'industriel britannique] Richard Cobden, l'exposition [de 1851] « va faire tomber les barrières qui ont séparé les peuples des différentes nations », « témoigner de la république universelle », du « triomphe de l'industrie, au lieu du triomphe des armes » et incarner le « traité d'amitié entre toutes les nations sur la surface de la terre ».*[33]

De son côté, « Le prince Albert lui-même se félicite d''une période de transition des plus merveilleuses, qui tend rapidement à accomplir cette grande finalité vers laquelle, d'ailleurs, toute l'histoire pointe – la réalisation de l'unité de l'humanité' ».[34] La fantasmagorie peine à cacher ce qui reste privilégié : l'accomplissement du processus industriel, le triomphe du monde marchand.
Un dessin (fig. 97) qui accompagne un ouvrage qui suit les pérégrinations d'une *famille* au Crystal Palace en 1851 saisit immédiatement ce qui se joue à Londres au cœur du siècle. On y voit les hommes du monde entier aimantés par un seul point. Cent ans avant l'exposition de Steichen, tous conviés à la grande réunion de famille. Tous ? Peut-être pas, ce que Marc Berdet précise ainsi : « en 1851, ne voulait-on pas laisser ce corps fangeux de l'ouvrier à la porte du Crystal Palace ? »[35] J'insiste sur l'épithète « fangeux ». Il faut rappeler que l'ouvrier se rend bien à l'Exposition (pensons aux délégations italiennes qui documentent très tôt le sentiment ouvrier lors de ces manifestions) : un ouvrier propre, en bonne santé. Mais l'ouvrier au corps usé, abimé, couvert de fange reste quant à lui nié, refoulé. Cet ouvrier est peut-être plus proche du travailleur maghrébin de la Goutte-d'Or convoqué par Barthes que de la grande famille humaine dont on bégaie le fantasme.
C'est bien l'activité marchande qui reste la priorité, priorité recouverte par le vernis fantasmagorique de l'union des races, de l'entente entre les peuples, jusqu'au bien être du monde ouvrier, si souvent mis en valeur

dans les discours entourant la conférence de la paix, vers laquelle je reviens ici. En cette toute fin de 19e siècle, la France et la Russie travaillent main dans la main en termes d'échanges économiques. La Russie réforme le Rouble et mène une politique d'emprunt auprès de la France afin d'accélérer son processus d'industrialisation. Au même moment, les plaintes issues du monde ouvrier russe se développent, ciblant les conditions inhumaines qui se sont installées dans les ateliers. Ces plaintes connaitront un premier aboutissement en 1905 avec la fameuse pétition adressée au tsar, dans laquelle des ouvriers supplient leur souverain d'améliorer les conditions de travail. 1905, année d'une révolution réprimée dans le sang, et qui sera le sujet du célèbre film d'Eisenstein une vingtaine d'années plus tard. Pour paraphraser Roland Barthes, imaginons un court instant pouvoir interroger l'ouvrier russe de 1900, pour lui demander *ce qu'il en pense du parlement de la race humaine*.

Cette conférence est donc commémorée par Matuszewski au sein du salon russe de l'Exposition universelle tenue à Paris en 1900. Il s'agit des portraits, tantôt individuels, tantôt collectifs des acteurs présents et intégrant ce « parlement de la race humaine ». C'est bien par la photographie qu'un discours unificateur est rendu possible. L'exposition de Matuszewski est admirée. Il reçoit un prix dans la catégorie « application de la photographie au portrait » et la presse loue l'importance de son travail, à travers des commentaires qui viennent confirmer l'idée d'entente universelle. *Le Constitutionnel* déclare dans un élan lyrique : « n'est-elle pas, cette œuvre patriotique, comme une page saisissante et vécue de l'histoire contemporaine, une page d'où sortiront peut-être le bonheur de l'humanité et la paix du monde ».[36] Comme par magie, le bonheur semble pouvoir émerger d'une exposition de photographies. La magie, l'illusion entourent le projet de Matuszewski. Et le Cinématographe devait y trouver une place de choix. Magdalena Mazaraki, qui a grandement contribué à (ré)introduire le photographe et opérateur russo-polonais dans le champ historiographique français, écrivait en 2004 dans la revue *1895* :

> *En 1898, les préparatifs pour l'Exposition Universelle sont déjà bien avancés et Matuszewski a l'idée d'y présenter également ses épreuves cinématographiques. Le projet consistait en un diorama, peint par des artistes reconnus, accompagné de projections des vues réalisées au cours de la visite du président Félix Faure à Saint-Pétersbourg.*[37]

Le diorama, objet privilégié par Benjamin parmi tant d'autres pour penser les fantasmagories du 19e siècle, est l'un des révélateurs du caractère illusoire de la conférence de la paix, ainsi que de son prolongement parisien par Matuszewski. L'illumination, nous dit Tackels lisant Benjamin, c'est la révélation du caractère illusoire de la fantasmagorie par elle-même. Et c'est à l'« historien véritablement matérialiste », poursuit-il, d'activer par ses recherches cette illumination, en révélant ce que dissimulent les fantasmagories.[38] Même si l'idée est restée à l'état de projet, en voulant combiner les vues du cinématographe, qu'il considère comme témoin infaillible et objectif au service de l'histoire, au diorama, dispositif d'illusion, Matuszewski nous aide un peu plus à révéler le caractère fantasmagorique de son entreprise, et plus généralement la fantasmagorie du « parlement de la race humaine » : un voile homogénéisant qui recouvre les injustices liées au monde marchand.

Un demi-siècle plus tard, Steichen prolonge finalement cette idée de témoin idéal.[39] L'écart est pourtant sensible : l'artiste photographe a entre-temps fait son apparition (et c'est bien au nom de « l'art de la photographie » que parle Steichen dans l'avant-propos du catalogue de l'exposition). Pour autant, « l'artiste » est ici instrumentalisé dans le but de servir un discours qui confirme ceux du siècle précédent. En effet, l'artiste est seul capable, pour Steichen, de saisir ce qui se situe sous la surface des choses. Mais l'enjeu reste bien de révéler *la* vérité, une et indivisible : la photographie témoigne objectivement du « réel » (qui a pour nom « famille humaine ») et témoigne par la même occasion du progrès humain qui trouve un point d'achèvement dans la manifestation new-yorkaise de 1955 (et qui se prolongera, il s'agit là d'une exposition itinérante, qui s'est sédentarisée en 1994 à Clervaux, au Luxembourg, où elle est toujours visible). Vieille idée cependant, qu'une cartographie de quelques expositions étalées sur un siècle permet de révéler. La fantasmagorie comme pivot théorique est un outil précieux pour déceler ces bégaiements de l'histoire, bégaiements recouverts par quelques stratégies discursives qui voilent le caractère répétitif de certains phénomènes.

Reste à penser une dimension déterminante de toute fantasmagorie : l'utopie qu'elle recèle. « La fantasmagorie doit être illuminée », nous dit Tackels, c'est-à-dire désignée comme fantasmagorie. Mais elle doit être lue, poursuit-il, « comme un souhait, un projet onirique pour l'époque à venir, qui se libère des carences du passé immédiat pour mettre en avant un passé immémorial, sans manque et sans excès : une époque 'pré-historique' où se révèle une 'société sans classes' ».[40] Voilà, peut-être et bien malgré lui, le rêve mis en scène par Steichen (et contenu dans les stratégies discursives et d'expositions dès le tournant des années 1850).[41] Il nous appartient d'en saisir l'intensité et la force critique. Pour une époque à venir...

Illustrations

93. *The Family of Man*, Catalogue, Extraits, pp. 52-53.
94. Photogrammes extraits de *La Mélodie du monde* (W. Ruttmann, 1929).
95. Une du *Courrier de l'UNESCO* (détail), février 1956.
96. *Joueur de flûte péruvien*, dans *The Family of Man*, Catalogue de l'exposition.
97. Dessin extrait de Henry Mayhew et George Cruikshank, *1851, Or the Adventures of Mr. and Mrs. Sandboys and Family, Who Came up to London to Enjoy Themselves and to See the Great Exhibition*, David Bogue, Londres 1851.

Notes

[1] « Family of Man », *UNESCO* (en ligne), http://www.unesco.org/new/fr/communication-and-information/memory-of-the-world/register/full-list-of-registered-heritage/registered-heritage-page-3/family-of-man/, dernier accès 10 janvier 2018. Sur la « patrimonialisation » de l'exposition par l'UNESCO, voir l'article de Claude Dupuis : « 'The Family of Man' : réflexions autour des usages et de la patrimonialisation d'une exposition photographique controversée », *Diacronie, Studi Di Storia Contemporanea* (en ligne), n° 19, 3, 2014, dernier accès 10 janvier 2018. Plus généralement, ce texte, qui propose une synthèse de la réception critique du travail d'Edward Steichen, a été un appui précieux pour le développement de la présente réflexion.

[2] Bruno Tackels, « La critique de l'histoire et ses prolongements politiques », dans *Petite introduction à Walter Benjamin*, L'Harmattan, Paris 2001, p. 101. C'est Bruno Tackels qui souligne.

[3] Charles Péguy, *Clio. Dialogue de l'histoire et de l'âme païenne* (1912-1913), Gallimard, Paris 1942, p. 245. Sur les relations entre témoin et histoire et les commentaires critiques de Péguy, voir prioritairement les travaux de François Hartog, tout particulièrement *Croire en l'histoire*, Flammarion, Paris 2013, pp. 69-70.

[4] Point de départ, j'y insiste. Certes, l'exposition de Steichen occupe une place conséquente dans ce bref essai. Néanmoins, l'enjeu principal relève moins, je le répète, d'une étude de cas considérant un objet d'une rare complexité (et intensément commenté) que d'opérer une connexion entre *The Family of Man* et l'idée d'exposition universelle telle qu'elle se formule au mitan du 19e siècle. Ce faisant, je n'entends en aucun cas minimiser l'importance de la situation historique de chaque manifestation convoquée dans les pages qui suivent, ainsi que des événements qui ont pu jouer un rôle dans leur réalisation. Par exemple, la Seconde Guerre Mondiale est sans grand doute un repère important pour étudier *The Family of Man*, et tout particulièrement sa réception par des théoriciens critiques (pensons à S. Kracauer ou M. Horkheimer, particulièrement laudatifs) que l'on aurait imaginés plus sévères à l'endroit de cette manifestation. Plutôt que de *figer* chaque événement dans tel ou tel contexte, leur raccordement dans une histoire de plus longue durée permet d'insister sur leur caractère fantasmagorique, en ceci que les différentes entreprises que je convoque se révèlent entrer au service d'une histoire des vainqueurs, liée ici à l'avènement du capitalisme industriel. C'est dans cette perspective que je souhaite convoquer des auteurs particulièrement attendus (de Barthes à Sekula), dont les réflexions me permettent d'asseoir l'orientation critique de mon propos, *autour de ce concept central de fantasmagorie*. Pour une relecture récente de *The Family of Man*, je renvoie en priorité à Gert Hurm, Anke Reitz, Shamoon Zamir (sous la di-

rection de), *The Family of Man Revisited. Photography in a Global Age*, I.B. Tauris & Co. Ltd, Londres-New York 2018. L'ouvrage contient une bibliographie très complète (pp. 276-281), qui témoigne de la richesse de la littérature consacrée à cette manifestation majeure du milieu du siècle dernier.

[5] Edward Steichen, *The Family of Man* (1955), catalogue bilingue (français/anglais), MoMA, trad. Jean Malaquais, Musée d'Art Moderne de la ville de Paris, 1956, np.

[6] Roland Barthes, « La grande famille des hommes », dans *Mythologies*, Seuil, Paris 1957, p. 162.

[7] *Idem*, p. 163. Susan Sontag, dont on sait la proximité de pensée avec l'essayiste français, insistera aussi sur ce point. Associant Steichen à D. Arbus, pourtant diamétralement opposés, à travers leur négation de l'histoire, elle écrit à propos du photographe américain : « en visant à montrer que les individus naissent, travaillent, rient et meurent partout de la même façon, 'La Famille humaine' nie le poids déterminant de l'histoire, des différences, des injustices, des conflits authentiques et inscrits dans l'histoire » (*Sur la photographie* [1977], Christian Bourgois, Paris 2008, p. 55, trad. de l'anglais [États-Unis] par Philippe Blanchard [avec la collaboration de l'auteure]).

[8] « *If I did not Work, these worlds would perish* », Catalogue de l'exposition, cit., p. 75.

[9] Roland Barthes, *Mythologies*, cit., p. 164.

[10] Allan Sekula, *Écrits sur la photographie*, trad. Marie Muracciole, Beaux-arts de Paris, Paris 2013, p. 199.

[11] *Idem*, p. 198.

[12] *Idem*, p. 199.

[13] Roland Barthes, *Mythologies*, cit., p. 163

[14] Allan Sekula, *Écrits sur la photographie*, cit., p. 202. C'est Allan Sekula qui souligne.

[15] Voir Marc-Emmanuel Mélon, « The Family of Man ou le contre-film », dans *The Family of Man. Témoignages et documents*, Artevents, Luxembourg 1994, p. 55 (l'auteur y cible la singularité de l'exposition, dont le dispositif inverse les conditions classiques de l'expérience de la salle obscure : « le spectateur [y est] mobile et l'image fixe »). Voir également François Albera, « Sur trois photographies de Johan van der Keuken », dans *Cinémas*, vol. 17, n° 1, 2006, p. 109 (l'accrochage des tableaux s'apparente, selon Albera, « *au montage d'un film* » [souligné dans le texte]). Ce texte de François Albera permet d'envisager la critique de la fantasmagorie steichenienne *par le travail artistique*. Pour le théoricien, en effet, van der Keuken « polémiquera avec cette exposition dans la plupart de ses films, jusque dans ses installations » (p. 110). Plus récemment, voir également l'exposition critique *The Family of the Invisibles*, Seoul Museum of Art (SeMA) et Ilwoo Space de Séoul, 5 avril-29 mai 2016.

[16] Je tiens ici à remercier Édouard Arnoldy pour ses conseils et plus généralement les discussions que nous avons pu avoir autour du film de Ruttmann, de l'exposition de Steichen, ainsi que des commentaires critiques (de Barthes, Sekula) ou (curieusement) non critiques (de Kracauer, et l'on pourrait ajouter Horkheimer, autre penseur critique auteur d'un commentaire positif à propos de *The Family of Man* – j'y reviens dans une note en toute fin de texte) qui ont suivi la fameuse exposition du MoMA (sur ces points, voir Édouard Arnoldy, *Fissures. Théorie critique du film et de l'histoire du cinéma d'après Siegfried Kracauer*, Mimésis, Paris 2018, pp. 126-133).

[17] Laurent Guido, « Le film comme 'symphonie du monde'. L'universalité des gestes rythmiques dans *Melodie der Welt* et sa réception française », dans *Intermédialités*, n° 16, 2010, pp. 105-128 (voir également Id., *L'Âge du rythme*, L'Âge d'homme, Lausanne 2007, pp. 440-441).

[18] *Idem*, p. 107.

[19] *Idem*, p. 110.

[20] Edward Steichen, *The Family of Man*, CBS TV and Robert Northshield Productions, MoMA Film Archives, New York 1956, cité dans Lynn Spiegel, « Innocence Abroad : the Geopolitics of Childhood in Postwar Kid Strips », dans *Kid's Media Culture*, Duke University Press, Durham-Londres 1999, p. 57 (c'est moi qui traduit).

[21] Roland Barthes, *Mythologies*, cit., p. 163.

[22] *Idem*, p. 164.

[23] Carl Sandburg, « Prologue », Catalogue de l'exposition, cit., np.

[24] *Ibidem*.

[25] Edward Steichen, « Photography : Witness and Recorder of History », dans *The Wisconsin Magazine of History*, vol. 41, n° 3, printemps 1958, pp. 159-167.

[26] *Idem*, p. 159 (c'est moi qui traduit).

[27] *Ibidem* : « When the camera is used by an artist, while retaining its mechanical objectivity, it becomes an additional tool for penetrating beneath the surface appearance of things ».

[28] Beaumont Newhall, *L'Histoire de la photographie. Depuis 1839 et jusqu'à nos jours* (éd. augmentée de 1949), Bélier-Prisma, Paris 1967, pp. 17-30 et pp. 67-82.

[29] Boleslas Matuszewski, « Une Nouvelle source de l'histoire (Création d'un dépôt de cinématographie historique) » (1898), repris (*fac-sim*) dans Magdalena Mazaraki (sous la direction de), *Boleslas Matuszewski. Écrits cinématographiques*, AFRHC/Cinémathèque française, Paris 2006, p. 9. Matuszewski appartient à un moment charnière dans les rapports entre histoire et médias photographiques. Léon Vidal avant lui et Albert Kahn par la suite ont posé les jalons d'une conception de l'histoire intrinsèquement associée à l'image mécaniquement reproduite. Parmi une bibliographie aujourd'hui foisonnante, voir Teresa Castro, « Les Archives de la Planète et les rythmes de l'histoire », dans *1895*, n° 54, 2008, pp. 56-81 et Éléonore Challine, Laureline Meizel, « La fabrique des archives photo-cinématographiques (1894-1914) : du musée des Photographies documentaires aux Archives de la planète », dans Julie Maeck, Matthias Steinle, *L'Image d'archives. Une image en devenir*, PUR, Rennes 2016, pp. 67-86.

[30] William T. Stead, *Chronique de la Conférence de La Haye 1899*, J. Hoekstra, La Haye 1901, p. 1.

[31] Robert Arthur Talbot Gascoyne-Cecil, lettre du 9 novembre 1897, cité dans William T. Stead, *Chronique de la Conférence de La Haye 1899*, cit., p. 8.

[32] Pour reprendre le titre du premier chapitre d'un petit ouvrage de Paul Young (qui ne fait jamais mention d'Edward Steichen !) consacré aux liens entre l'Exposition de 1851 et la mondialisation, « The Great Family of Man », dans *Globalization and the Great Exhibition. The Victorian New World Order*, Palgrave Macmillan, Basingstoke-New York 2009, p. 17-56. Avec Paul Young, on rappellera brièvement ce qu'il conviendrait de développer de façon détaillée : très tôt, Karl Marx et Friedrich Engels (dans le *Manifeste du Parti communiste*) repèrent cette stratégie fondamentale du monde marchand, qui a besoin, pour se développer, du rapprochement entre les Nations (*Ibidem*, pp. 8-9).

[33] Marc Berdet, *Fantasmagories du capital*, La Découverte, Paris 2013, p. 75. Les propos de Cobden sont issus de *A guide to the Great Exhibition. Containing a Description of Every Principal Object of Interest*, Routledge, Londres 1851, pp. 12-13. Cobden est un personnage important dans cette histoire qui noue de façon très serrée commerce et paix. Au cœur du siècle, l'Europe voit apparaître quelques hérauts-industriels qui considèrent le libre-échange comme le substrat d'une paix universelle (pensons, en France, au Lyonnais François Barthélémy Arlès-Dufour). Dans ce contexte, l'influence du saint-simonisme est évidemment fondamentale.

[34] *Ibidem*. La citation est issue de *Official Descriptive and Illustrated Catalogue*, t. 1, Spicer, Londres 1851, p. 4.

[35] *Idem*, p. 103.

[36] « Une demeure historique », dans *Le Constitutionnel*, n° 222, 4 octobre 1900, p. 1.

[37] Magdalena Mazaraki, « Boleslas Matuszewski : photographe et opérateur de cinéma », dans *1895*, n° 44, 2004, p. 54.

[38] Bruno Tackels, *Petite introduction à Walter Benjamin*, cit., pp. 102-103.

[39] Je n'insiste pas ici sur les écarts fondamentaux entre photographie et cinéma(tographe), notamment chez Matuszewski, qui voit dans la photographie animée un témoin absolument incorruptible, contrairement à l'image fixe, que l'on peut retoucher. En ayant à l'esprit ces différences, je souhaite penser ensemble ce que Siegfried Kracauer nommait les « médias photographiques ».

[40] Bruno Tackels, *Petite introduction à Walter Benjamin*, cit., p. 103.

[41] Dans son commentaire du discours d'ouverture prononcé par Max Horkheimer à l'occasion du passage de l'exposition à Francfort (en 1958), Martin Jay entrevoit également le « potentiel critique » (« *critical potential* ») de l'œuvre d'E. Steichen. Après avoir pointé les contradictions du théoricien critique, qui défend ici ce qu'il dénonce ailleurs, Jay conclut son texte en convoquant un texte fameux du jeune Karl Marx (« Contribution à la critique de la philosophie du droit de Hegel »), ainsi que la non moins fameuse réflexion consacrée à la religion considérée comme « opium du peuple ». Jay y rappelle que, chez Marx, la religion est tout à la fois « expression de » et « protestation contre » ce qu'il nomme la « souffrance réelle ». De la même manière, *The Family of Man* contiendrait en son sein une puissance de protestation contre les souffrances humaines. Jay considère que cette protestation était la bienvenue dans

une Allemagne post-nazie encore fragile, tout comme est se révèle (« hélas », ajoute-t-il) d'une malheureuse actualité en ce 21^{e} siècle (Martin Jay, « Max Horkheimer and *The Family of Man* », dans Gerd Hurm, Anke Reitz, Shamoon Zamir, *The Family of Man Revisited. Photography in a Global Age*, cit., pp. 66-67. Le texte de Max Horkheimer « *The Family of Man* – All of Us » est disponible dans ce même volume). Difficile d'établir le degré de proximité entre cette proposition du spécialiste de l'École de Francfort (brièvement exposée en conclusion d'un texte d'une dizaine de pages) et le concept de fantasmagorie tel que forgé par Walter Benjamin. Disons seulement que si l'idée de contradiction apparaît, il n'est nullement question, dans ces lignes conclusives, d'un *retournement de l'exposition contre elle-même*. Cet aspect *destructeur* (pour reprendre un terme cher à Walter Benjamin) est fondamental dans la conception benjaminienne de la fantasmagorie. Or, dans les propos de Martin Jay, la survie de l'exposition de Steichen est au contraire profitable aux regards contemporains, opérant comme une piqûre de rappel, à une époque où la misère n'en finit pas de survivre : « *new sets of eyes can still profit from the experience of viewing Steichen's 'blockbuster exhibition of post-war photographic ideology'* », (*Idem*, p. 67).

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Impatience (1928) de Charles Dekeukeleire. Construction et circulation d'un mythe historique

Introduction

En dehors du domaine très ciblé de l'histoire du cinéma belge ou d'avant-garde, entendre parler de Charles Dekeukeleire aujourd'hui n'est pas courant. Ce cinéaste belge, dont on situe les travaux entre la fin des années 1920 et le début des années 1960, semble enfoui dans les profondes couches de l'histoire du cinéma. Bien qu'ayant réalisé quatre films expérimentaux majeurs, il travaille principalement le documentaire – dont il produit environ quatre-vingts œuvres, la plupart étant des commandes. C'est un artiste qui théorise par ailleurs sa pratique à travers des ouvrages publiés, des articles et des notes personnelles.[1] Enfin, il représente le fonds d'archives de personnes le plus conséquent de la Cinémathèque Royale de Belgique à Bruxelles, où se côtoient la plupart des films, leur photothèque et environ treize-mille feuillets de documents divers.

Paradoxe historique, où une immense matière archivistique rencontre le silence, ou presque. En réalité, Charles Dekeukeleire persiste, il résiste contre l'oubli. Son nom ressurgit çà et là, à la surface de nombreux écrits sur l'histoire et la théorie du cinéma, quasi systématiquement sous la forme de la référence et toujours vu depuis le prisme sacralisant d'une sélection minime de films. Lorsqu'apparaît le nom de Dekeukeleire, c'est pour être associé avant toute chose aux œuvres expérimentales que sont les quatre films *Combat de Boxe* (1927), *Impatience* (1928), *Histoire de détective* (1929) et *Flamme Blanche* (1930). On le retrouve parfois aux côtés des documentaires *Terres Brûlées* (1936) et *Thèmes d'inspiration* (1938), se situant dans les domaines respectifs du cinéma ethnographique pour l'un et du film sur l'art pour l'autre. De ces six films, vecteurs du rayonnement historique du cinéaste, les écrits font apparaître une fascination toute particulière pour *Impatience* (fig. 98).

Le film dure trente-six minutes et se compose, selon son carton d'introduction, de « quatre personnages » que sont une femme, une motocyclette, une montagne et des blocs abstraits. Les différents éléments apparaissent très déconstruits, dans ce que l'on pourrait décrire comme un dialogue entre les fragments du corps de la femme (jouée par l'actrice Yonnie Selma) et ceux de la machine que la moto incarne. Les plans de la montagne, pris depuis un véhicule en mouvement, placent supposément le film dans le cadre diégétique du voyage – ce que les autres prises de vue démentent en donnant à voir une moto immobile, le mouvement n'étant jamais créé que par la caméra et le montage. Le frémissement mécanique des images par lesquelles l'échange prend place se trouve fréquemment interrompu par l'intervention brève des blocs, qui ressemblent à un détail de rouage que l'on fait tourner lentement. Le montage, au rythme millimétré, fait s'enchaîner les fragments dans une absence totale de hiérarchie, plongeant le spectateur dans l'illusion d'un mouvement presqu'impossible, à travers l'expérience d'une sensibilité proprement machinique.

Les images enivrantes d'*Impatience* en font l'une des œuvres les plus marquantes de Dekeukeleire, ce dont atteste un certain nombre de références historiques et théoriques.[2] Pourtant, de tous les films indépendants du cinéaste, c'est de celui-ci que demeurent, aujourd'hui, le moins de traces matérielles. Le peu d'archives qui subsiste permet d'en cartographier le voyage dans l'espace et le temps, afin de soulever l'ambiguïté historique qui se cache derrière cet objet entre fascination et oubli.

*Éclatement : les trajectoires d'*Impatience *dans l'histoire*

Depuis notre point de vue actuel, rien d'étonnant à ce que ce film esthétiquement et structurellement hors de son temps se démarque – rayonnant dans l'histoire au détriment d'une grande partie de la production du réalisateur. À l'image de son semblant d'intrigue, *Impatience* est une œuvre qui a affaire au voyage.

Aujourd'hui, très peu d'archives[3] nous renseignent sur les conditions de production de l'œuvre – si ce n'est que l'aventure débute dans la résidence familiale Dekeukeleire, le jeune cinéaste étant alors âgé de vingt-trois ans. *Impatience* fait huit-cents mètres, ne coûte que huit-mille francs belges et revendique avant tout sa volonté d'aller contre le système dominant. Dekeukeleire se veut totalement indépendant : il tourne les images dans sa chambre, les développe dans la cave et les monte lui-même.[4] Comme pour la production, les archives qui se réfèrent à la diffusion du film sont obscures et ne permettent d'en cartographier le voyage qu'à travers ses *surgissements aléatoires* dans certains contextes, dont ceux de l'exposition et du musée.

D'après ce que les archives dévoilent, la feuille de route du film démarre à Ostende, où il est projeté pour les deux premières fois en février et mars 1929, programmé par Henri Storck dans le ciné-club qu'il fonde en 1928. Il est alors accueilli, selon quelques articles de presse, par une salve de rires incompréhensifs. C'est ensuite hors de ses frontières, à Paris[5] que débute quelques mois plus tard le succès d'*Impatience*. Voilà le film lancé, pour l'année suivante, sur les routes de l'avant-garde cinématographique. En juin 1929, *Impatience* est diffusé à la célèbre exposition « Film und Foto » de Stuttgart.[6] Programmé par Hans Richter, il apparaît dans la section sur l'avant-garde[7] entre autres aux côtés de Man Ray, René Clair, Germaine Dulac et Walter Ruttmann. Le film assure ainsi à Dekeukeleire une place parmi les *grands noms* du cinéma. Par sa présence à Stuttgart, l'œuvre semble emprunter la voie des expositions et manifestations artistiques de renommée internationale – ce que démontre sa présentation, en mars 1930, au Filmliga d'Amsterdam. Le film y recueille – de nouveau – quelques critiques acerbes avant d'être projeté en juin de la même année au Vieux Colombier à Paris. Il y reçoit de succincts mais néanmoins chaleureux compliments puis, semble-t-il, fuit dans l'oubli.

Dans les archives, le vide : si l'on en croit les documents regroupés dans les différents fonds qui concernent le cinéaste belge, la réception du film s'arrête brutalement. Il faudra attendre cinquante ans pour que redémarre la flânerie d'*Impatience*, lequel surgit subitement au Museum of Modern Art en 1980, dans le cadre d'une programmation dédiée au cinéma belge.[8] Depuis lors, et toujours en partant du discours des archives, le film a été programmé en 1995 au festival de Pesaro en Italie, à la Cinémathèque Française en 1996, puis plusieurs fois à la Cinémathèque Royale de Belgique, dans le cadre de rétrospectives.

Les archives font apparaître un manque que certains discours oraux – et informels – permettent de compléter. Ainsi a-t-on pu remarquer[9] que le film avait été projeté, entre 1930 et 1980, à de nombreuses reprises, sous différents formats et selon diverses configurations – soit que les événements en question n'aient pas été répertoriés, soit que les archives aient disparu. Cependant l'intérêt ici restera focalisé sur la matière directe avec laquelle l'historien peut composer. À travers cet itinéraire fragmenté, qui passe le film sous silence pendant un demi-siècle, les archives cristallisent l'irrégularité du voyage historique d'*Impatience*.

Dans sa continuité, le trajet fait en outre apparaître une bifurcation autrement plus symptomatique de l'éclatement du périple du film dans l'histoire. C'est de la circulation non plus de l'oeuvre mais de certaines de ses images, isolées, mobilisées dans des contextes différents qu'il conviendrait de discuter. Ce type de remploi débute sur un hommage. En 1982, voilà onze ans que Dekeukeleire est décédé. Quelques uns de ses films viennent d'être redécouverts et la *Revue Belge du Cinéma* édite un numéro entièrement consacré au réalisateur (fig. 99). En couverture, on trouve des morceaux de pellicule d'*Impatience*. La révérence à Dekeukeleire passe par son association directe, visuelle, au film. Du réalisateur, ce sont donc ces photogrammes que nous gardons en tête. Et ce sont *ces images précisément* qui finiront par se détacher, s'émanciper de leur créateur pour aller s'apposer quatorze ans plus tard sur l'affiche du festival « Cinémémoire » de la Cinémathèque Française (fig. 100). Parmi la centaine de films qui sont projetés, le festival diffuse *Impatience* au sein d'un hommage à Jacques Ledoux, défunt conservateur de la Cinémathèque royale de Belgique. Le film ne vient alors plus seulement symboliser Dekeukeleire, mais tout un cinéma belge incarné dans la figure emblématique d'un Ledoux qui, toute sa vie, s'est acharné à découvrir et valoriser les films les plus obscurs comme les plus talentueux de son pays.

À travers un tel morcèlement de ses trajectoires matérielles, le film résonne dans l'histoire par fragments éclatés, formant une constellation d'images qui, semble-t-il, contribue à créer autour de Dekeukeleire une sorte d'aura mythique.

Constructions : de l'éclat au mythe

En ne ressurgissant que par intermittences, le film passe de l'éclatement à l'éclat : d'*Impatience* subsiste l'idéal esthétique de quelques images reproduites et parsemées çà et là. Le film s'est par exemple récemment mis à intégrer la culture populaire, notamment par son remploi dans le *VJing* par l'action entre autres du groupe de *rock* flamand contemporain Amatorski, qui accole les images de l'œuvre sur celles de l'une de leurs chansons, elle-même appelée *Impatience* (fig. 101).

Cet idéal, pour aller plus loin, se poursuit non plus à travers les images mais à travers *l'idée-même* du film. Ce phénomène peut être compris par le prisme du festival du cinéma expérimental l'Âge d'Or de Bruxelles, créé par la Cinémathèque royale de Belgique. En 2016, on y met en place une compétition nommée « Impatience » en hommage à Dekeukeleire, avec un prix de 2500 euros décerné à un premier ou deuxième film jugé le plus original en termes de technique.

Il se crée alors une ambivalence. D'expositions en musées en passant par les festivals, *Impatience*, film dont on ne connaît que peu de choses, rarement diffusé si ce n'est dans certains contextes très ciblés et peu officiels, voit son image (publique) projetée dans la célébrité. Il adopte la notoriété des films que tout cinéphile « se doit de connaître » et intègre ainsi le Panthéon des films « qui ont fait l'histoire ». Cela, il le fait à mesure qu'il se désagrège dans l'espace et le temps historique : de film il devient photogramme, perdant d'abord son mouvement. D'image il devient idée, abstraction, perdant alors sa matière. *Impatience* prend des airs de culte.

Dans son esthétique, son rythme, mais aussi à travers le récit de sa création, le film a à voir avec le fétiche – à commencer par son actrice, amie mais surtout amante de Dekeukeleire, avec qui il a entretenu une relation profondément destructrice.[10] Ensuite par son érotisme latent, qui relève plus de la technique que du contenu,[11] l'œuvre plonge son spectateur dans l'expérience avant tout sensible d'une vision machinique. En 1928, cette expérience divise : elle est déroutante et difficilement descriptible. Comme le laisse supposer la binarité des critiques évoquées plus tôt, les sentiments dépeints par les articles sont rarement neutres. Qu'elles soient positives ou négatives, les émotions suscitées par le film sont fortes, nerveuses et peu rationnelles. Les critiques contemporaines d'*Impatience* paraissent ainsi relever avant tout de la fascination, sans doute parce que l'époque du film fut incapable de le catégoriser, ne possédant pas encore les outils théoriques pour analyser et expliquer cette expérience inédite de la machine.

C'est semble-t-il à partir de 1974 que des tentatives de catégorisation se font entrevoir. Préparant un travail sur les films *underground*, d'avant-garde et expérimentaux,[12] Ernst Schmidt Jr. déclare dans une lettre à Jacques Ledoux que « les films d'avant-garde de Charles Dekeukeleire […] seraient peut-être à montrer dans le contexte plus général du cinéma constructiviste ».[13] Cette théorie se poursuit dans l'ouvrage publié, où *Impatience* est bel et bien cité dans la catégorie du constructivisme mais aussi dans celle du dadaïsme, sans que ces choix ne se voient justifiés par l'analyse ou la description. De son côté, P. Adams Sitney propose de faire entrer *Impatience* rétrospectivement dans la catégorie du cinéma structurel en le comparant à Michael Snow, rapprochement qui est repris par Patrick de Haas[14] et Kristin Thompson.[15] Allant du développement succinct à l'apostrophe, ces différentes définitions n'aboutissent jamais vraiment, laissant le film dans le domaine de l'inclassable, dans un entre-deux qui rappelle les divergences suscitées par sa réception. Un comportement symptomatique se crée dans les discours qui se développent ensuite autour d'*Impatience*, ceux-ci restant quasi systématiquement en surface et dépassant rarement la citation, aussi admirative que brève.

Les trajectoires discursives d'*Impatience* se mettent à fonctionner de la même manière que ses trajectoires matérielles, s'éloignant de l'objet pour n'en conserver que des *a priori*. De cette manière se construit un imaginaire historique autour d'un Dekeukeleire vu uniquement depuis le prisme de ses films expérimentaux et d'emblée catégorisé dans les mouvements constructiviste, dadaiste ou structuraliste, sans que l'analyse ne le justifie textuellement (ou si peu). Ainsi s'érige finalemet une figure de mythe construite sur la circulation de discours *sur* l'objet, très peu de discours *de* celui-ci ou des archives qui l'entourent. La notoriété de Dekeukeleire au travers d'*Impatience* se bâtit sur un paradoxe historique.

Contradictions : Impatience*, une figure fantasmagorique ?*

Le discours des textes qui évoquent le film s'oppose à celui des archives. Le fonds Dekeukeleire est conséquent. D'un côté, environ huit-cent cinquante documents divers nous renseignent, surtout, sur les films. De ces documents, seuls quarante-huit se réfèrent d'une manière ou d'une autre à *Impatience*. De l'autre côté subsistent environ dix-mille pages de notes personnelles, qui prennent la forme de cent-vingt-huit carnets remplis par le cinéaste de manière régulière, entre 1931 et 1962. Elles alimentent principalement les réflexions que Dekeukeleire développe sa vie durant sur le cinéma. Le film n'y est mentionné qu'une vingtaine de fois, souvent pour dire à quel point le réalisateur trouvait l'œuvre imparfaite. Jamais à propos de la production, de la diffusion, ou encore pour exprimer un avis substantiel sur son travail expérimental. Ces absences s'expliquent dans le huitième carnet datant de 1931, dans lequel Dekeukeleire explique avoir « brulé […] le cahier n° 3, qui contient des explications sur *Impatience* ».[16] Entre le manque éloquent de sources, les menues mentions du cinéaste à son film dans les carnets et les rares documents de presse – qui ne se vouent majoritairement pas à l'analyse ou au développement – se profile toute l'ambiguïté du film, dont le rayonnement historique semble après tout se construire sur du vide.

Les trajectoires d'*Impatience* finissent par l'emmener à contre-courant des positions qui animent Dekeukeleire au départ à la fois de son œuvre et de sa conception du cinéma. Cette dernière répond principalement à des convictions socio-politiques, lesquelles manquent tout autant de visibilité historique. Dans ses écrits théoriques, Dekeukeleire envisage le cinéma avant tout comme un outil devant amener à réformer les structures sociales. En 1942, préparant le brouillon d'un ouvrage, il se positionne : « La race humaine continuera à évoluer sous la conduite de maîtres toujours choisis dans d'autres milieux (des maîtres qui s'assimileront les qualités des vaincus) (et parmi les vaincus se livreront les nouvelles classes lorsque les vainqueurs seront usés) ».[17] Le rôle du cinéma pour lui, est précisément de conduire la révolution des vaincus sur les vainqueurs en allant, comme l'énonce Anne-Françoise Lesuisse, « contre les contraintes capitalistes de rentabilité et le divertissement avilissant ; [le cinéma] devenant [alors un] lieu de rencontre et de connaissance du peuple par lui-même ».[18]

Là où une partie des discours à vocation biographique tend à ignorer ou à sous-estimer la valeur du travail documentaire du cinéaste, il est important de souligner que lorsqu'il parle de lutte des classes, c'est d'abord à travers le cinéma documentaire qu'il entend mener la révolution. On dénote deux tendances dans les discours qui entourent Dekeukeleire : l'une, produite le plus souvent hors de Belgique, s'oriente vers les films expérimentaux en premier lieu, soulignant de manière relativement péjorative le passage de Dekeukeleire au documentaire de commande. Parmi les exemples se démarque James Hoberman, parlant de « documentaires qui ne se distinguent pas particulièrement ».[19] Patrick de Haas affirme, lui, que « Dekeukeleire en vient donc […], au nom d'un art utile qui doit servir la cité, à dénigrer l'esprit d'avant-garde auquel il a participé dans sa jeunesse ».[20] L'autre tendance, moins courante, consiste à ne pas établir de frontière stricte entre les documentaires et les œuvres avant-gardistes du cinéaste. On la retrouve notamment chez Anne-Françoise Lesuisse, dont le texte ne manque pas de souligner la porosité des travaux de Dekeukeleire. Elle est l'une des rares personnes à avoir consulté les carnets de notes du réalisateur, lesquels font clairement apparaître la théorie et la pratique documentaire comme les aspects majeurs du travail du cinéaste, toutes deux développées incessamment durant trente ans (de 1931 à 1962). Les œuvres expérimentales, loin d'être rejetées par Dekeukeleire, jouent un rôle relativement minime dans sa théorie sur le cinéma, se présentant davantage comme des recherches formelles sur les limites du médium à transmettre ses idées révolutionnaires. Elles deviennent des points d'entrée pour la compréhension des convictions du cinéaste plus que des fins en soi : elles s'envisagent dans leur dialogue avec le reste de la production de Dekeukeleire.

En outre, celui-ci explique depuis une perspective sociologique que le cinéma « créé et détruit les mythes avec une égale facilité ».[21] Si le film façonne le mythe, s'il devient le mode d'expression d'un capitalisme dominant, il peut aussi en détruire les cadres pour redonner pouvoir au peuple, aux vaincus. Rétrospectivement et paradoxalement, *Impatience* semble cristalliser cette idée de mythe et la transporter sur un plan historique, à ceci près que ce qu'il détruit (formellement) du mythe (historique) qu'il crée est passé sous silence dans les discours qui le mettent en avant – par l'absence, notamment, d'analyse. Dans une esthétique et un montage structurés sur le fragment et la rupture, qui ne se résolvent jamais à hiérarchiser quelque élément que ce soit et qui sollicitent une concentration et une réflexion accrues de la part du spectateur, *Impatience* refuse d'être lisse. Le film résiste : il détruit la surface linéaire des choses et ignore le temps. *Impatience* va à contre-courant, nie tout système, toute catégorisation. Il est éclaté, multiple, débordant de gros plans divers, de détails plus signifiants les uns que les autres.

Les trajectoires discursives du film dans l'histoire construisent une illusion où celui-ci s'érige en vainqueur dans la filmographie de Dekeukeleire, sous les airs de vaincu du film en marge. Mais dans un tel mouvement, c'est le reste de la production du cinéaste qui est reléguée aux marges : quatre-vingts films, plusieurs ouvrages et articles publiés et trente ans de notes qui cristallisent l'entièreté de sa pensée sur le cinéma – celle d'un documentaire qui, par son accessibilité, pourra amener le peuple à se réformer lui-même. En intégrant les discours dominants et homogénéisants d'une avant-garde culte, se déconstruisant pour devenir une image aussi fascinante qu'isolée, *Impatience* semble finalement s'ancrer dans un réseau discursif et matériel fantasmagorique.

Conclusion

Traçant son chemin à travers diverses expositions ou manifestations artistiques, le film semble se décomposer et se disperser dans l'histoire pour former une constellation d'images puis d'idées fétichisantes. L'éclat à travers lequel rayonne *Impatience* vient, tout illusoire qu'il est, mettre en lumière l'invisibilité du reste pour le conforter dans une histoire des vainqueurs qu'il fuyait en premier lieu et que les archives du fonds Dekeukeleire réfutent. Les discours que véhiculent les sources d'un côté et les différentes trajectoires d'*Impatience* de l'autre s'éloignent en des points opposés pour faire apparaître, dans l'intervalle, tout le paradoxe du film. Dépossédé de son propre mouvement, séparé de son contexte historique et artistique, l'œuvre devient fantasmagorique à travers les discours dont elle fait l'objet dans le temps.

Illustrations

98. *Impatience*, planche de photogrammes. Source : fonds Dekeukeleire, Cinémathèque royale de Belgique.
99. *Revue Belge du Cinéma*, numéro spécial « Charles Dekeukeleire », Automne 1982. Source : Cinémathèque royale de Belgique.
100. Catalogue du festival « Cinémémoire » de la Cinémathèque Française, édition 1996. Source : Cinémathèque royale de Belgique.

101. *Impatience*, clip du groupe flamand Amatorski. Source : https://www.youtube.com/watch?v=7QhZ4A8XxqU, dernier accès 16 juillet 2018.

Notes

[1] La pensée de Dekeukeleire sur le cinéma se trouve développée tout au long de ses carnets de notes et fait l'objet de plusieurs articles de théorie et de conférences entre 1927 et 1946. Il a, dans ce cadre, également publié deux ouvrages : *L'Émotion Sociale. Réflexions sur un problème actuel*, Éd. La Maison du poète, Bruxelles 1942 ; et *Le Cinéma et la pensée. Le cinéma : art-clef de l'analyse du monde moderne. Son Rôle dans la poursuite de l'aventure humaine,* Éd. Lumière, Collection Savoir, Bruxelles 1947. Le cinéma défend, comme ces deux titres le laissent transparaître, un cinéma à la vocation sociale, dont la principale mission est de rendre le peuple conscient de ses propres structures (celles du modernisme).

[2] Le rayonnement historique de Dekeukeleire se trace en grande partie à partir d'*Impatience*, qui apparaît dans les dictionnaires du cinéma comme dans les ouvrages les plus théoriques, souvent en première ligne. On y reconnaît, une majorité du temps, l'innovation technique et thématique que représente le film. À titre d'exemples peuvent être cités les travaux – dont cet article s'inspire et qu'il cite plus bas – d'Ernst Schmidt et Hans Scheugl, Patrick de Haas, Kristin Thompson ou encore Philippe Dubois. On retrouve également le film cité dans quelques ouvrages de référence sur l'avant-garde, comme celui de François Albera, *L'avant-garde au cinéma*, Armand Colin, Paris 2005. Les références ne sont que très rarement développées, peu d'analyses substantielles et écrites du film subsistent.

[3] Cette étude se réfère principalement aux archives Dekeukeleire de la Cinémathèque royale de Belgique, soit le fonds le plus conséquent consacré au réalisateur. Entre autres fonds, on trouve aussi des documents – toujours en petit nombre – à la Bibliothèque nationale de France, la Cinémathèque Française et la Cinémathèque Suisse, dont aucun ne renseigne sur *Impatience*.

[4] Ces informations traversent l'un et l'autre article, en premier lieu énoncées par Paul Werrie, dans « L'œuvre de Charles Dekeukeleire ou le lyrisme documentaire », dans *Reflets,* Bruxelles, avril 1940, page inconnue. Source : fonds Dekeukeleire, Cinémathèque royale de Belgique.

[5] Dans *Le Carillon*, Félix Labisse dédie à *Impatience* un article nommé « Pour disculper ceux qui rièrent » en mars 1929. Il y indique que Dekeukeleire « présente actuellement son film à Paris dans un studio d'Avant-Garde » (page inconnue), sans toutefois préciser lequel. Jusqu'ici, les archives n'ont pas encore permis de retrouver le lieu en question. On peut supposer qu'il s'agit du Studio des Ursulines, dans lequel le cinéaste diffuse son premier film *Combat de Boxe* en 1928, de plus amples recherches sont à mener.

[6] À ce titre, voir la réédition du catalogue de l'exposition dans Ute Eskildsen, Jan-Christopher Horak (sous la direction de), *Film und Foto der Zwanziger Jahren*, Württembergische Kunstverein, Stuttgart 1979.

[7] A. Kraszna-Krausz, « Exhibition in Stuttgart, June, 1929, and its effects », dans *Close-Up*, vol V, n° 6, décembre 1929, p. 460.

[8] « Belgium Today : Recent Films and Rediscoveries », du 1er au 12 mai 1980, au Museum of Modern Art de New York. Source : fonds Dekeukeleire, Cinémathèque royale de Belgique.

[9] Ces remarques ont pu émerger suite aux discussions à la fin de la présentation orale de cette étude. *Impatience* a notamment bénéficié de nombreuses projections en Belgique, à Paris et en Italie – dans le cadre de recherches sur le cinéma futuriste dans le dernier cas. Il est aujourd'hui par ailleurs souvent remployé au sein de festivals sur la musique et le cinéma.

[10] Entre *Impatience* (1928) et environ 1932, on retrouve dans les notes personnelles de Dekeukeleire plusieurs récits dédiés à la passion déchirante qu'il vouait à Yonnie Selma, allant de la retranscription de rêves fiévreux à certains brouillons de lettres. Il écrira à ce propos un scénario nommé *La Lettre* en 1931, qu'il ne tournera jamais mais qui se trouve aujourd'hui accessible dans le fonds Dekeukeleire à Bruxelles.

[11] À ce propos, voir l'article de Philippe Dubois, « Charles Dekeukeleire ou l'impatience du cinéma », dans *Revue Belge du Cinéma*, numéro spécial « Charles Dekeukeleire », Automne 1982, pp. 42-45.

[12] Hans Scheugl, Ernst Schmidt Jr, *Eine Subgeschichte des Films, Lexicon des Avantgarde-, Experimental- und Undergroundfilms*, Suhrkamp, Frankfurt am Main 1974.

[13] Lettre de Ernst Shmidt Jr. à Jacques Ledoux, 1974. Texte original (c'est moi qui traduit) : « Sehr unterschät sind auch die Avantgardefilme von Charles Dekeukeleire, auf dessen frühe Filme ebenfalls aufmerksam gemacht werden sollte. Das Früwerk von Dekeukeleire wäre vielleicht in gesamtzsammenhang mit dem Filmkonstructivismus zu zeigen ». Source : fonds Dekeukeleire, Cinémathèque royale de Belgique.

[14] Voir l'article de Patrick de Haas, « Impatience », dans Dominique Païni, *Une encyclopédie des Cinémas de Belgique*, Yellow Now, Crismée 1990, pp. 134-135.

[15] Kristin Thompson, « (Re)discovering Charles Dekeukeleire », dans David Bordwell's website on cinema, 2009, www.davidbordwell.net/essays/dekeukeleire.php, dernier accès 16 juillet 2018.

[16] Charles Dekeukeleire dans son huitième carnet, du 5 février au 7 avril 1931, p. 3. Source : fonds Dekeukeleire, Cinémathèque royale de Belgique.

[17] Charles Dekeukeleire dans son quarante-cinquième carnet, du 25 juillet au 11 novembre 1942, p. 89. Source : fonds Dekeukeleire, Cinémathèque royale de Belgique.

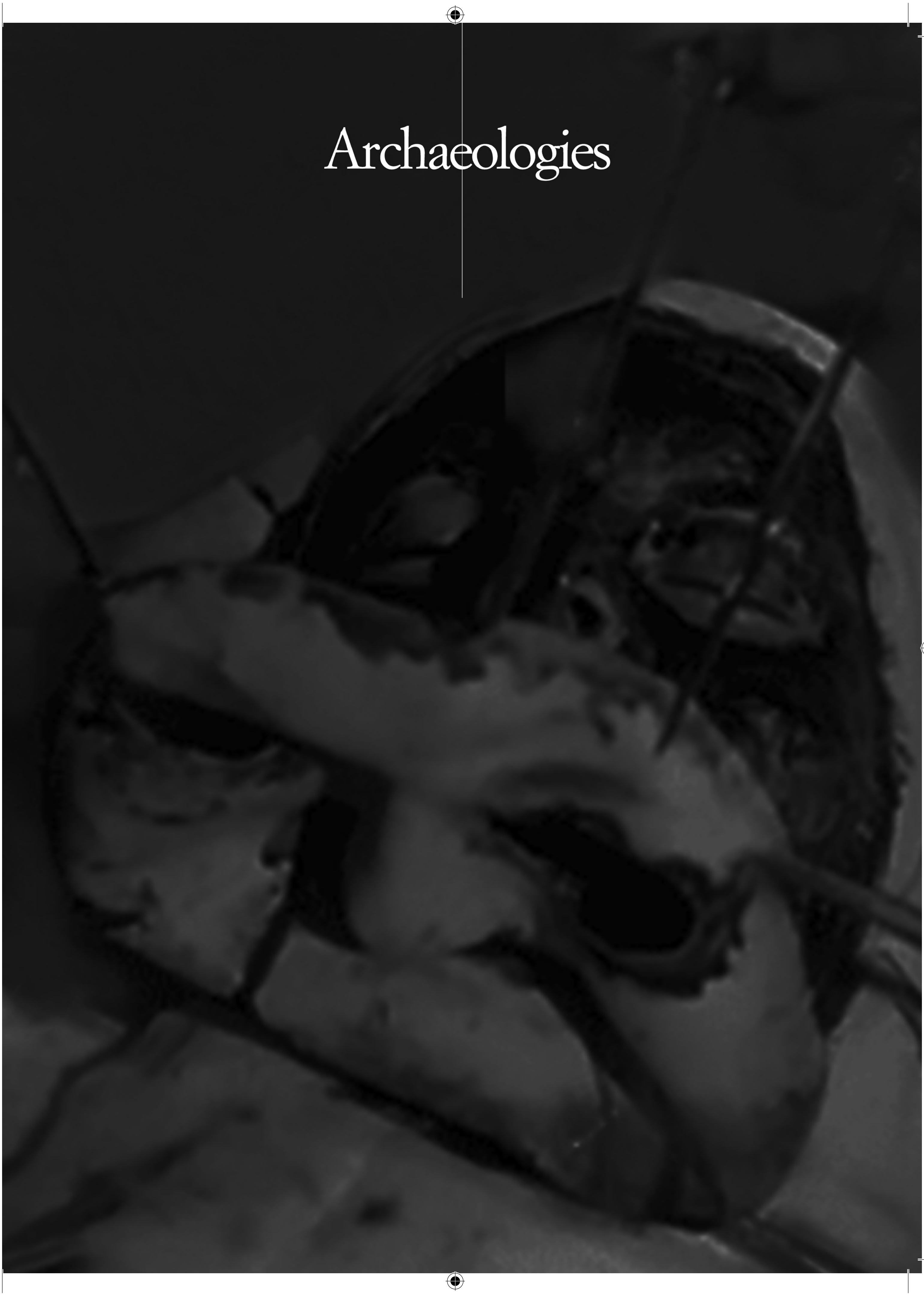
[18] Anne-Françoise Lesuisse, « Charles Dekeukeleire ou l'utopie obligatoire », dans Roger Odin (sous la direction de), *L'Âge d'or du documentaire. Europe : Années cinquante. Tome 2 : Grande-Bretagne, Belgique, Pays-Bas, Danemark, Norvège, Suède*, pp. 56-57.

[19] James Hoberman, « Fleming Creatures », dans *Village Voice*, n° 31, 31 juillet 1984, p. 55. Texte original (c'est moi qui traduit) : « Dekeukeleire made some 80 documentaries, most of them short, none of them terribly distinguished ».

[20] Patrick de Haas, « Charles Dekeukeleire », dans Dominique Païni, *Une encyclopédie des Cinémas de Belgique*, Yellow Now, Crismée 1990, p. 90.

[21] Charles Dekeukeleire, dans son quarante-cinquième carnet, du 25 juillet au 11 novembre 1942, p. 63. Source : fonds Dekeukeleire, Cinémathèque royale de Belgique.

Archaeologies



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A Screen at the Bottom of the Sea: Public Aquariums in the 19th Century

The phenomenon of the 19th century public aquariums has been exenstively examined in the field of science history and Victorian studies, but it has been partly ignored by surveys consecrated to early cinema and the archaeology of the observer: the aquarium in its attractional factors, and the connections with art, literature, photography, popular media and films. The resemblance with the cinematic experience is noteworthy: the presence of a darkened place and illuminated "screens"; a dreamlike perceptual regime; an unlimited presence of "actors" and "narratives" (the marine community and its behaviour) moving in front of an audience. The main hypothesis of this essay is that the exploration of the underwater environment made possible by the spread of public marine exhibits, provides an opportunity to rethink the universe of moving pictures: the fast growth of fish-houses in the second half of the 19th century could be usefully considered in the same manner as moving painted panoramas, live magic lantern shows and other forms of amusements commonly associated with the archaeology of cinema.

The center of propagation of this sensory pleasure was London: a point of departure of the aquarium mania that very soon reached Europe and United States. The first fish-house opened to the public in 1853 at Regent's Park, in the London Zoological Gardens, and in the next twenty years aquariums would prosper in the major European cities. International exhibitions were frequently decorated by huge marine attractions, and they signalled a turning point in the aquarium's definition: they marked the passage from a limited space to an extended illusionistic labyrinth, implementing an experience that would be defined as *immersive*. With world's fairs the bright and recreational vision offered by fresh-water vessels in the parlors or small fish tanks in the old menageries, definitely leaves the place to a precise spectacular itinerary, guiding the visitor in order to create a pleasant walk underwater, with a passage from light to dark, the noise of a cascade and a path descending into a natural cave. An example was the aquarium designed by Edouard Betencourt for the International Exhibition of Pisciculture at Boulogne-sur-Mer, in 1866. Hitherto the usual custom had been to inclose the fish in glass tanks, analogous to the cases used in museums to exhibit them alive, dead or stuffed. On the contrary, Betencourt constructed an unparalleled "grotto" aquarium with new and picturesque arrangements, striking with pleasure and curiosity the eye of the spectator.[1] The same philosophy guided Betencourt in the aquarium designed for the Parisian Universal Exhibition in 1867. A waterfall introduced visitors in a series of underground grottoes lighted artificially, and a stairway arrived in an immense hall, a huge diving-bell,

> *in what seems to you to be the depth of the sea. All manner of marine monsters are swimming around and above you, in a basin of glass so immense, that they seem to have no suspicion of their captivity. Every now and then some monster of the deep approaches to the wall of glass and stares at you with his great round eyes as curiously as you are staring at him.*[2]

The illusion of a walk at the bottom of the sea and the intriguing eye contact established with the marine inhabitants was frequently highlighted; many reporters remarked the presence of an artificial cave lighted with lamps and decorated with stalactites and stalagmites.[3] The sensation of the grotto effect rapidly encouraged other projects, such as the Maritime Exhibition in Le Havre in 1868, with a spectacular replica of the Fingal's Cave from Staffa island,[4] and the Berlin Aquarium (1869) (fig. 102), which included an imitation of the blue grotto of Capri. The leading idea of the German institution was to imitate nature as much as possible: "All the pillars, vaults and walls are natural stone […]. In this way the delusion becomes perfect, and the visitor at the Berlin Aquarium believes himself to be by magic hand transported into a real grotto within the bosom of the sea."[5]

Darkness was frequently noticed as one of the novelty in the aquarium. An article on the Acclimatization Gardens in Paris stressed the special contrast between darkness and glowing effects: "In this home of the finny tribe you enter a dark cavern and only receive the glorious light of day through glass tanks of water in which swim all the fishes in which we believe."[6] In 1896 a reporter of *Science* described the captivating impression produced in the aquarium of Naples: "You enter a large square room with huge aquaria on the sides. Each aquarium is built into the wall and all the light comes from above, so that the observer standing within the darkened room sees the animals as though himself emerged amongst them."[7]

The concept of a dark hall, so necessary for the cinematic experience, was still a quite brand new philosophy in the second half of the 19th century, and one could notice a *fil rouge* with the development in glass production and artificial lighting. In the mid-1830s, new glass-making technology allowed the mass fabrication of glass sheets of unprecedented size; translucent plates became part of a comprehensive institutional change in museums, department stores, exhibitions and galleries, a revolution in the experience of the visitors of a large metropolis: "glass walls allowed sunlight to enter, iron reduced the number of obstacles in the line of vision, and the objects on display were allowed to stand out for view."[8] Stores were furnished with an uninterrupted surface of large sheets of glass going from the ceiling to the ground, and with the help of lamps they made the goods on display look more attractive, especially once that business hours were extended into the late evening: "the illuminated window as stage, the street as theatre and the passers-by as audience - this is the scene of big-city night life. As the boulevard at night developed in the nineteenth century, it did in fact look like an interior out of doors."[9] If technologies of display induced elaborate desires of wares, with a subsequent larger movement towards the pleasures of consuming spectacles, according to Schivelbusch the new art of lighting was gradually transforming the theatre stage, which grew brighter, and the audience, which got darker: "the idea of darkening the auditorium was to enhance this feeling of community between the viewer and the drama by shutting out the social phenomenon of the audience for the duration of the play."[10] But aquariums shared more common points with new light-based media like panoramas, diorama and dissolving views, which placed spectators in semi-darkness in front of a screen or an illuminated canvas, forging the illusion of looking at a picture that was not part of the observer's world.

The very extraordinary voyages of the aquarium

The abovementioned practices are evidence of how aquariums entered a flux absorbing influences from other cultural forms. The glass cages were the stars of a scientific show that in some occasions contemplated a background *décor*, a theatrical art of lighting, sound effects, a *crescendo* of attractions and a visual manipulation of the mobile spectator. Institutions devoted to the public exhibition of sea life, adopted spectacular tendencies deriving from popular shows, music perfomances and literature. On the other hand, the large success of the aquarium and its powerful prestige was immediately exploited in optical instruments, songs, theatre and novels located in the underwater world.[11] The marine tanks inspired music as exemplified by the Neapolitan song *Piscetiello, Piscetiè! (Aquarium)*, or the song *The Wonderful Octopus: or Mrs. Jones' visit to the Brighton Aquarium*.[12] As suggested by the title, the latter describes a visit to the Brighton Aquarium, pointing out the experience of being among the fish:

> *To walk about among the fish,*
> *O Dear good gracious me,*
> *It ra-a-ly was: said Mrs. Jones,*
> *Like walking through the sea;*
> *Fishes here, fishes there,*
> *You never did, I'm sure,*
> *Ever see so very many*
> *Funny looking fish before.*

The song encourages a direct and "human" interaction with the fish seen as stars of a living show, and is also a sample of the celebrity of the octopus, that mesmerized hordes of visitors after the popularity of Victor Hugo's novel *Les Travailleurs de la Mer* (1866). Hugo's account of the fight between the fisherman Gilliat and a giant octopus had an incredible impact on the collective imagery. Many publications touched upon the topic, trying to confirm or to reject the terrible image of the creature labelled by Hugo as the "Devil-fish."[13] Henry Lee, a naturalist of the Brighton Aquarium, devoted an entire work on the subject titled *The Octopus; or the "Devil-Fish" of Fiction and of Fact*. Lee warned the reader "that the famous story of *The Toilers of the Sea* should be regarded as a romance and not as a scientific treatise," and in a chapter of his study he tried "to compare the 'devil-fish' of the author with the octopus of nature, and to indicate the points on which M. Hugo's representation of his 'monster' is either substantially correct, partly true, or entirely unreal."[14] Public aquariums tried to exploit the excitement created by the novel, and all the marine institutions put on display the monstrous octopus.[15] A newspaper advertisment of the Grand Aquarium in boulevard Montmartre in Paris, was designed around the picture of a giant *pieuvre* (fig. 103).[16]

Les Travailleurs de la mer also reminds us that aquariums evoked a surreal dimension: in one of the chapters of this novel, at the end of a deep analysis of the state of revery, and after considering that all that mystery which we call dreams is nothing but the approach of an invisible reality, Hugo concludes: "Le rêve est l'aquarium de la nuit." A powerful visual representation of the aquarium as a dream comes from a satirical portrait of the English biologist Thomas Henry Huxley, published in the *Illustrated Sporting and Dramatic News* and titled *What an aquarium should be* (fig. 104). It shows the eminent scientist sleeping in bed sourrounded by a group of floating fish; among the animals, a swordfish is skewering a notebook titled "Materials for our biographies." The engraving is a graphic visualization of Huxley's dreams, and it recalls the famous Goya's etching *The Sleep of Reason Produces Monsters*.

In a creative mixture between science and popular culture, the underwater iconography was nourished by successful novels like Jules Verne's *Vingt mille lieues sous les mers* (1870), which made multiple references to the visual experience of the aquarium in order to outline the underwater landscape witnessed from Captain Nemo's Nautilus.[17] In Albert Robida's *Voyages très extraordinaires de Saturnin Farandoul* (1879), a parody of Jules Verne's fiction and popular scientism, a variety of hilarious cliched situations are shown about the 19th century aquarium. In the Australian episode of the book, a huge whale drags Farandoul's ship for many leagues until beaching on the coasts of Melbourne. The whale, which involuntarily swallowed Farandoul's fiancé, the beautiful Mysora dressed in a futuristic diving suit, is captured and transferred to the Melbourne Aquarium,[18] institution directed by Valentin Croknuff, "savant âgé, mais incandescent" in search of new specimens for his collection. The marine monster is put into a huge tank with glass walls, "one of them looking onto Croknuff's bedroom, which forms the hub of a series of similar glass-walled tanks radiating from it. Here he plays the piano to his captive audience."[19] Robida describes in details the interiors of the Australian fish-house:

> *L'aquarium affectait une forme octogonale, il était composé de huit immenses bassins entourant une pièce centrale, dont M. Croknuff, pour être toujours au milieu de ses élèves, avait fait son cabinet de travail et sa chambre à coucher. De la sorte il vivait littéralement dans un monde sous-marin et pouvait, aussi bien la nuit que le jour, veiller à la santé de son personnel.*
> *Il était ainsi au courant de leurs petites habitudes, il étudiait leurs caractères et régnait enfin sur eux, en bon père de famille, les faisant changer de bassin lorsqu'ils s'ennuyaient et charmant à leur intention la longueur des soirées d'hiver par des symphonies sur le piano, exécutées avec la verve la plus merveilleuse.*[20]

Such a kind of description is even pointed out by many illustrations drawn by Robida himself. The illustrations clarify the effect of a room surrounded by glass panes and the dreamlike atmosphere in the aquarium (fig. 105). The fish are turned in emotional human beings, showing a special appreciation for the piano music; Croknuff's character is sketched as a parodic mad doctor devoted to the study of marine biodiversity and living his entire existence among the fish, before falling in love with Mysora, regurgitated by the whale (fig. 106). Once the girl realizes his feelings, she jumps in the tank, preferring the captivity and the company of the whale, waiting for the arrival of her saviour Farandoul. The next day, Mysora and the marine beast become a spectacle for the Melbourne crowds visiting the aquarium; here Robida ironically reverses the perspective, putting the girl in the "fins" of the fish, admired by hundreds of eyes on the other side of the glass window:

> *La pauvre Mysora, se voyant le point de mire de tous les regards, cherchait à se dissimuler le plus possible derrière des blocs de rochers couverts d'algues et de plantes marines; mais là, sur la face opposée de l'aquarium qui, nous l'avons dit, donnait sur le cabinet de M. Croknuff, elle retrouvait, appuyé contre la vitre, son odieux persécuteur qui lui envoyait les plus tendres baisers.*[21]

A fragment that is a perfect portrait of the aquarium as a theatre, and it outlines the importance of the audience's gaze through the glass, attracted by the inhabitants of the sea and, in this case, by a quite peculiar syren wearing a spherical diving-helmet. As a comic parody of Jules Verne's universe, *Saturnin Farandoul* offers a vibrant vision on the aquarium craze. At the end of the Australian episode, Farandoul, with the help of his army of monkeys, attacks and breaks the windows of the aquarium in order to rescue his beloved fiancé. Croknuff, almost strangled by the giant octopus escaped from its prison, provokes a mortal explosion with the dynamite. A large part of the scenes mentioned above, will be reproduced in *Le avventure straordinarissime di Saturnino Farandola*, the Italian screen adaptation by Marcel Fabre for Ambrosio Film (1914). Fabre used the novel as a literary source and as an iconographic repertoire. If the work was particularly inspired by Robida's illustrations, another reference were productions such as Pathé's *Un Drame au fond de la mer* (F. Zecca, 1901), which also featured an undersea set, and the films of Georges Méliès: with these intertextual references Fabre created "one of the most curious and amusing inventions of the adventurous-fantasy cinema, in a sort of continuous visual delirium."[22] The aquarium episode is shot using the tank as an entire translucent wall in the background of Croknuff's room, allowing a vantage viewpoint in the interiors of the water, and creating an interesting interaction with characters in the foreground. The aquarial view is filmed by a single camera position: *Saturnino Farandola* is in fact a multiple-shot film where the shot is still working as an autonomous and self-sufficient *tableau*, typical of a period when "filming was not done in a truly organic manner, or determined by the editing."[23] The aquarium is here designed exactly like a sort of screen, a vitreous barrier separating Mysora from her lover and from the outside world. In this case the transparent plate interposes an almost invisible bodiless layer of matter between the seer and the seen, and glass shows its paradoxical ethereal substance: it works at the same time as barrier and medium.[24]

Viewing underwater

Considering the numerous interrelations with the fictional genre, it is not surprising that at the end of the century the aquarium intersected with the emerging *cinématographe* Lumière. In 1896, the Lumière brothers filmed an aquarium for the first time: a moving *nature-morte* of squirming fish, eels and frog framed behind glass.[25] The frame of the shot exactly coincided with the size of the glass container, almost a symbolic transfer from the glazed screen to the silver screen. In the Lumière film one can find a typical cross sectional view behind the glass, a comfortable setting for early spectators (fig. 107). After the reenactment of the bottom of the sea in *Visite sous-marine du Maine* (1898), *Le Voyage dans la lune* (1902), *Le Royaume des fées* (1903), *Voyage à travers l'impossible* (1904), Georges Méliès will employ a similar aquarial view in *La Sirène* (1904), in which the French magician increases the size of an aquarium so much that it turns into a real ocean. The aquarium as a screen is also a recurring feature in early popular-science films such as Gaumont's *Petites anguilles* (1910), and Éclair's *L'Ecrevisse* (1912) and *Les Animaux transparents de la mer* (192?).[26]

But where exactly is located the aquarial observer?

In a study devoted to the early illustration of scenes of oceanic communities in the history of art, Stephen J. Gould notices how a defining feature of the aquarium is "a *stable community* of aquatic organisms that can be viewed, not from above through the opacity of flowing waters with surface ripples, but eye-to-eye and from the side through transparent glass and clear water."[27] If on the one hand such an eye-to-eye orientation is unusual because a fish-eye vision through the water is not a convenient point normally afforded to us, on the other hand a side examination through glass is always considered the most natural for depicting a sea environment from within, watching creatures at their own level and putting the observer as if he or she were underwater with them. Even though such a preference may seem both natural and obvious, according to Gould the history of illustration reveals a different story, because until the mid-19th century, the conventional picture of sea specimens adopted a terrestrial vantage point from above, not directly from the side: the ordinary way of approaching a marine community in illustrations was the same as it was in life, organisms were exclusively drawn as assemblages desiccating on shore or swimming on the top of the waters.[28] A possible reason is that most people had never seen saltwater living things in an eye-to-eye view before the invention of the aquarium. Fish houses provided a new perspective, changing the traditional overhead view from the shore for an underwater position rapidly converted in a default representation: after the Victorian aquarium craze, the aquatic cross sectional views opened a window into an underwater realm, a glimpse into an unusual world observable in aquarium.[29]

We can assume that one of the revolutions provoked by the aquarium takes place in the position reserved for the spectator. Film scholar Giuliana Bruno remarked how film spectators move across an imaginary path, traversing multiple sites and times: "film inherits the possibility of such a spectatorial voyage from the architectural field, for the person who wanders through a building or a site also absorbs and connects visual spaces."[30] The moving visitors in the aquarium followed an evident architectural path suggested by a sequence of windows and attractions: the aquarium took part in the creation of a mobile spectator, with its interplay with visual instruments and narrative arts and, particularly, with a dynamic walk made of consecutive emotional experiences. In this sense, the consumer of an architectural (viewing) space like the aquarium, with its sequence of multiple "screens" and natural "actors" and scenes, could be assumed as a prototype of the film spectator. But it is especially the chance to examine face to face a hidden realm in a semi-divine manner, to adopt an amphibious regime without dangerous consequences, that defines the place of the observer underwater establishing a similarity with film spectators. More than the imaginary path, is the opportunity to occupy an impossible position immersed in the dark, behind a crystalline screen, enjoying a nature never seen before feeling the vertigo of a god-like power. Such a peculiar situation provides a perfect example of an archetypical image: the nautical metaphor of life-as-sea-voyage, the contraposition of dry land and deep sea that can be considered the primary frame of reference for the paradoxical metaphorics of existence. In his work *Shipwreck with Spectator*, Hans Blumenberg analyzed the multiple possible actualizations of such a popular paradigm in philosophy. According to Blumenberg, humans "live their lives and build their institutions on dry land. Nevertheless, they seek to grasp the movement of their existence above all through a metaphorics of the perilous sea voyage. The repertory of this nautical metaphorics of existence is very rich."[31] Blumenberg highlights that one of the most pervasive actualizations of the life-as-sea-voyage metaphor includes a spectator who observes the distress of those at sea, during a storm or a shipwreck, from the safety of dry land. The observer on the shore survives through one of his useless qualities: the ability to be a spectator. The metaphor includes an uninvolved witness taking note of his or her distance from the danger with satisfaction or even enjoyment: it is only because the spectator stands on firm ground that he or she is fascinated by the fateful drama on the high seas. The spectator-diver, who walked among dark aisles adorned with windows opened on a mysterious deep sea landscape, could enjoy an identical existential experience.

With its technological component and a broad spectrum of representational strategies, the aquarium is an indicator of the intricacy of connections among science, popular amusements and moving pictures in the

19th century. Transparent plates interposed an invisible "film" between the observer and the marine dwellers, exposed in sequential basins set in the wall like paintings in an art gallery. Even though the underwater universe is not mentioned among the "phantasmagorias" listed by Walter Benjamin in his *Arcade Project*,[32] the aquarium should be rightfully considered a "dream house of the collective", in the same way of universal exhibitions, panoramas, museums, stations, *passages*: a public institution, able to profitably renegotiate the definition of "screen," that cannot be underestimated in the context of the early cinema season.

Illustrations

102. *Berlin Aquarium*, in Heinz-Georg Klös, Hans Frädrich, Ursula Klös, *Die Arche Noah an der Spree*, FAB Verlag, Berlin 1994.
103. *Grand Aquarium*, in *Paris-programme*, October 1867.
104. *What an Aquarium should be*, in *Illustrated Sporting and Dramatic News*, March 11, 1876.
105. *Valentin Croknuff in the aquarium*, in Albert Robida, *Voyages très extraordinaires de Saturnin Farandoul*, Paris 1879, p. 71.
106. *Valentin Croknuff and Mysora in the aquarium*, in Albert Robida, *Voyages très extraordinaires de Saturnin Farandoul*, Paris 1879, p. 89.
107. *Aquarium* (Lumière, 1896).

Notes

[1] Cf. *The Brooklyn Daily Eagle*, May 10, 1866, p. 1.

[2] Max, "The French Exhibition," in *The Sidney Morning Herald*, May 15, 1867, p. 2. Even though there are many accounts published on European newspapers, it is interesting noticing the global echo of international fairs and other cultural phenomena in countries such as United States and Australia.

[3] L. P. Y., JR., "Paris," in *The Courier-Journal*, September 13, 1867, p. 1; "The Great French Exhibition," in *The Times*, October 24, 1867, p. 10.

[4] Cf. "Havre International Maritime Exhibition," in *The Times*, June 4, 1868, p. 9; "The Havre Marine Exhibition," in *The New York Times*, June 15, 1868, p. 1.

[5] *Pittsburgh Weekly Gazette*, November 17, 1868, p. 4.

[6] Cf. "Parisian notes," in *The Sydney Morning Herald*, October 10, 1865, p. 8.

[7] T. J. Morgan, "Impressions of the Naples Zoological Station," in *Science*, vol. 3, January 3, 1896, p. 17.

[8] Andrew H. Miller, *Novels behind Glass: Commodity Culture and Victorian Narrative*, Cambridge University Press, Cambridge 1995, p. 57.

[9] Wolfgang Schivelbusch, *Disenchanted Night: The Industrialization of Light in the Nineteenth Century* (*Lichtblicke. Zur Geschichte der kunstlichen Helligkeit im 19ten Jahrhundert fahrhundert*, Carl Hanser Verlag, Miinchen Wien 1983), University of California Press, Berkeley-Los Angeles-London 1988, p. 148.

[10] *Idem*, pp. 206-207.

[11] As an attraction in different European cities, public institutions like the Bois de Boulogne aquarium in Paris were a common subject in magic lantern's dissolving views. Cfr. Thomas Hall, *Hall's Illustrated Catalogue of Magic Lanterns, Dissolving Lanterns, and Stereopticons*, Boston 1873, p. 84.

[12] Cf. Vincenzo Valente, Roberto Della Campa, *Piscetiello, Piscetiè! (Aquarium)*, G. Santojanni, Naples 1885; Walter Greenaway, Vincent Davies, *The Wonderful Octopus: or Mrs. Jones' visit to the Brighton Aquarium*, S. Brainard's Sons, Cleveland 1883.

[13] Cf. "A real "devil-fish," in *The Evening Telegraph*, December 26, 1866, p. 7; "A Real 'Devil-Fish' – Victor Hugo's Narrative Matched," in *The Daily Journal*, January 27, 1867, p. 1; Oscar Comettant, *De Paris à quelque part*, Degorce-Cadot, Paris 1869, pp. 78-81.

[14] Henry Lee, *The Octopus; or the "Devil-Fish" of Fiction and of Fact*, Chapman&Hall, London 1875, p. 19.

[15] Cf. "Opening of the Paris Exposition," in *National Republican*, April 20, 1867, p. 1; "Crystal Palace Aquarium," in *The Times*, November 17, 1871, p. 6; "The Devil Fish. Victor Hugo's Famous Monster," in *Democrat and Chronicle*, February 8, 1872, p. 3.

[16] The aquarium opened in the same year of publication of *Les Travailleurs de la mer.*

[17] Cf. Elena Canadelli, *Mondi acquatici. Viaggio tra scienza, arte, immaginario*, in Vinzia Fiorino, Gian Luca Fruci, Alessio Petrizzo (eds.), *Il lungo Ottocento e le sue immagini. Politica, media, spettacolo*, ETS, Pisa 2013, p. 106.

[18] Here Robida "anticipates" the foundation of the Melbourne aquarium, which was not opened until 1885.

[19] C. B. Thornton-Smith, "Parody, Anticipation and Ironical Relativism: The Australian Episode in Albert Robida's *Voyages très extraordinaires de Saturnin Farandoul…*," in *Journal of European Studies*, vol. 18, no. 3, 1988, p. 167.

[20] Albert Robida, *Voyages très extraordinaires de Saturnin Farandoul*, Paris 1879, p. 72.

[21] *Idem*, p. 80.

[22] Antonio Costa, *I leoni di Schneider. Percorsi intertestuali nel cinema ritrovato*, Bulzoni, Roma 2002, p. 53 (my translation).

[23] André Gaudreault, *From Plato to Lumière: Narration and Monstration in Literature and Cinema* (*Du litteraire au filmique*, Meridiens Klincksieck, Paris 1988), University of Toronto Press, Toronto 2009, p. 12.

[24] Cf. Isobel Armostrong, *Victorian Glassworlds. Glass Culture And The Imagination 1830-1880*, Oxford University Press, Oxford 2008, pp. 3-11.

[25] Cf. Hanna Rose Shell, *Things under Water. E. J. Marey's Aquarium Laboratory and Cinema's Assembly*, in Bruno Latour, Peter Weibel (eds.), *Making Things Public. Atmospheres of Democracy*, MIT Press, Cambridge (MA) 2005, p. 326. The Lumière film had a direct precedent in Étienne-Jules Marey's chronophotographic work published in 1890 in the magazine *La Nature.* Cf. Massimiliano Gaudiosi, *Marey's Aquarium: The Underwater World and the Archaeology of Cinema*, in Will Abberley (ed.), *Underwater Worlds. Submerged Visions in Science and Culture*, Cambridge Scholars Publishing, Newcastle upon Tyne 2018.

[26] Cf. Oliver Gaycken, *Devices of Curiosity: Early Cinema and Popular Science*, Oxford University Press, Oxford 2015, pp. 106-125.

[27] Stephen J. Gould, *Leonardo's Mountain and the Diet of Worms. Essays on Natural History*, The Belknap Press of Harvard University Press, Cambridge (MA)-London 2011^2, p. 59.

[28] Cf. *Idem*, p. 67.

[29] Cf. Renee M. Clary, James H. Wandersee, "Through the Looking Glass: The History of Aquarium Views and Their Potential to Improve Learning in Science Classrooms," in *Science & Education*, no. 14, 2005, p. 592.

[30] Giuliana Bruno, *Atlas of Emotion. Journeys in Art, Architecture and Film*, Verso, New York 2002, p. 56.

[31] Hans Blumenberg, *Shipwreck with Spectator. Paradigm of a Metaphor for Existence* (*Schiffbruch mit Zuschauer. Paradigma einer Daseinsmetapher*, Suhkamp, Frankfurt am Main 1979), MIT Press, Cambridge (MA) 1997, p. 7.

[32] Walter Benjamin, *The Arcade Project* (*Das Passagen-Werk*, Suhrkamp, Frankfurt am Main 1982), Harvard University Press, Cambridge (MA)-London, 2002.

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Marcel Griaule and the Dogon: Masks and Cinema as Twinned Technologies of Mediation in the Musée de l'Homme

Today, in the heart of the labyrinthine Musée du quai Branly – Jacques Chirac, in the 7th arrondissement of Paris, are enshrined a collection of masks from the Dogon region of Mali, which were once held in the Musée de l'Homme, the French national ethnographic museum. These include a nationally celebrated hare mask, iconic eagle masks (fig. 108), and a mask beaded with cowrie shells depicting a young woman of Peule replete with prosthetic breasts. These forms stare down with empty eyes alongside many of their pantheon; masks representing multi-story houses, ancestors and animals. At intervals, the silence of the space is broken with discordant, syncopated orchestral music and the fast-paced narration of an authoritative voice scarred by the crackles of degraded recording. The sound emanates from a small screen mounted beside the entrance to the room. Peering into it one sees black and white fragments of the mask types on display being performed. A boy in a hare mask dances frenetically at the camera, forcing the shot to careen as the cinematographer struggles to keep him in frame. In another fragment we see eagle masks oscillating in choreographed unison, the dancers swinging their heads so that the masks' tails sweep the dusty earth. In yet another scene, a group of masked figures climb a ladder to an earthen roof where they cavort, forming a mass of bodies, carving and grass skirts. Looking between the static masks, pinned to the wall like insects or crucifixes, and the film, I am struck by the different sets of information being conveyed by these objects and the cinematic images of them, and the complex and unsettling ways in which masks and cinema interact in the space of the museum. To explore this dynamic between artefact and moving image, I examine the history of these masks, and of the short film, Marcel Griaule's *Sous les Masques Noirs*, of 1939, in the Musée de l'Homme.[1]

In the 1930s in France, cinema's potential as a tool for ethnological research was developed by a community of scientists centred around the Musée de l'Homme. As an institution, the museum's architecture, collections, research methods and its public profile had been established in response to a series of universal and colonial expositions. Indeed, it's initial iteration, the Musée d'ethnographie du Trocadéro, was built to house the artefacts of the Exposition universelle of 1878, in which innovative technologies and tableaux of the material and performative cultures of societies from around the world were brought together.[2] The second manifestation of the institution, the Musée de l'Homme, was redesigned and developed in the 1930s as a centrepiece of the Exposition Internationale des Arts et Techniques dans la Vie Moderne of 1937.[3] Under the leadership of Physical Anthropologist, Paul Rivet, it would become a "museum laboratory" devoted to the universalist impulse to both analyse and proselytise "the indivisibility of humanity across space and time."[4] Like the world exhibitions to which is responded, technicity and culture were central foci of the museum's mission, profoundly influencing the development of scientific and theoretical research into material culture and in the evolution of ethnographic cinematic practices.

Approaching at the Musée de l'Homme through the lens of the short documentary made by the French ethnologist, Marcel Griaule, this paper examines the intersections between technologies of mediation in the cinematic research methods of the museum and in the Dogon *Dama*, or mourning masks that are the subjects of Griaule's film. These masks were made and performed by the Dogon people of colonial French Sudan (present-day Mali), who to this day are iconic of the rise of French ethnology.[5] Dogon masks held a preeminent place in the public collections and research history of the museum, and continue to be central attractions in their new home at the Musée du quai Branly. An initial collection of masks made following a well-publicised performance by twelve Dogon dancers at the Pavilion of West Africa at the 1931 Exposition coloniale internationale was closely followed by additional acquisitions during Griaule's famed expedition across Africa, the Mission Dakar-Djibouti of 1931-33.[6-7] It was on this expedition that Griaule first encountered the Dogon, the recording of whose cosmology and social structures became the focus of his life's work, developing novel, if controversial research methodologies as a founder of the new discipline of French ethnology.[8] In the context of the museum collection, Dogon masks were both highly esteemed for their formal aesthetic qualities, and for the insight they were seen to offer onto a sophisticated, but alternate ontological matrix.[9] This duality is one, I will argue, was one mirrored in the way that film was conceptualised as a medium of research and of communication by the community of the museum.

What I term "technologies of mediation" – including masks and other ritual accoutrements – form an overdetermined and ambivalent subject in the films made for the Musée de l'Homme. These technological objects, often used for purposes of communication in their autochthonous context, evoked ambivalence for western observers because they suggested both "otherness" and "familiarity." For filmmakers, these objects became efficient symbols, or externalisations of cultural difference. However, there was also a quality of similitude recognised by these filmmakers, who were still trying to come to grips with the properties of cinema, as a new technology of mediation, and its potential to communicate across cultural boundaries and promote understanding of other peoples. Film, therefore, must also be approached as an ethnographic technology, a tool with intriguing ontological equivalences to, as well as differences from, other forms of material culture.

I use the term "technology" here, in a sense defined by Bryan Pfaffenberger as "not only material culture but rather, a total social phenomenon, marrying the material, the social and the symbolic in a complex web of associations."[10] This definition has the effect of flattening the differences between the technologies taking the roles of subject, (in this case, masks) and the spectator, (or cinema). This technological relativism allows us to penetrate the traditions of ethnographic film and the technological motivations in *Sous les Masques Noirs*.

To do so, I will briefly outline the place of film in the ideological and methodological development of the museum, before turning to the theories about technology and communication developed by members of the institution's scientific community. In particular, I discuss those of the sociologist Marcel Mauss and the paleoanthropologist André Leroi-Gourhan. I then outline the function of masks and cinema as expressive mediums, using the concepts of agency and mediation developed by the British anthropologist, Alfred Gell in conjunction Walter Benjamin's theories of aura and reproducibility. Finally, I discuss how masks and cinema interact as technologies in film – asking the question; "what happens when one technology of mediation communicates another?"

Film and material culture in the research methodology of the museum

In the Musée de l'Homme, film was employed in conjunction with collections of material culture as a central technology for both understanding and proselytising universal humanity. This was a task which put into practice the theory of total social fact (*fait social total*), developed by the sociologist Marcel Mauss, who argued that beyond culturally specific differences, all people are united by shared human traits and patterns of behaviour (such as gift exchange). By finding patterns in data about individual societies, one could reveal structures that spanned the whole world.[11] Mauss, a charismatic pedagogue, would influence a generation of social scientists as well as surrealists connected to the museum with his associative and elastic approach to the cataloguing and comparison of cultural practices.[12] This methodology would result in two distinct, but imbricated practices within the community of the museum; first, the serial collection and comparison of data in the discipline of French Ethnology, and second, the generative juxtaposition of heterogeneity associated with the surrealist movement. These two approaches would be enmeshed in the magazine *Documents* (1929-1930), which was devoted to "Archéologie, Beaux-Arts, Ethnographie et Variétés."[13] Edited by Georges Bataille, this subversive panoply of thought developed interdisciplinary connections, publishing the writings of Griaule, Rivet, Michel Leiris, and many others associated with the Musée de l'Homme, whilst articulating many of the paradoxes inherent in the mission of the museum.

Following the more "scientific" branch of this community, the new school of French ethnology that was developing within the institution of the museum under Rivet was particularly object focused. Its collections, here, were conceptualised as embodiments of different societies that could be studied cross-culturally in the museum's laboratories. It was by encountering these objects, then, that museum visitors would be able to imagine the lives of people around the world as being both strikingly different, and also similar to themselves.[14] In the museum laboratory, film was studied alongside these artefacts as a way of analysing minute gesture and the context and use of artefacts in the field. In the public section of the museum, film was screened in a purpose-built cinema, both constructing images of otherness and drawing out global similarities and repetitions in cultural expression.[15] This duality of measured, scientific reasoning and the compelling edification of the public required that objects and film both be comprehended, presented and appreciated in ways that acknowledged their communicative multiplicity. This approach is perhaps epitomised in a surrealist "dictionary" entry on pottery, printed in the fourth edition of *Documents*, in which Griaule criticises a formalist approach to material culture, which, he argued, privileges the appreciation of "the shape of a handle" whilst overlooking an engagement with "the position of the man who drinks."[16] "Ethnography" wrote Paul Rivet in the same journal, "should not content itself with a strictly morphological study of objects made by man. It must also study […] the techniques, which last longer than the forms and are less easily derived."[17] Objects, then, were valued for the information they conveyed about humanity as much as for their aesthetic presence. "A tool's inclusion within a museum" therefore, as Denis Hollier articulates, "would not have the renunciation of its origins as condition."[18] Cinema would become a key technology for extrapolating this contextual, gestural and social information from static forms.

This use of cinema as a research tool to "salvage" the gestures of cultural practices considered to be under threat from modernity can be directly linked to the birth of cinema. Indeed, what is arguably the first ethnographic "film" – Félix Regnault's chronophotograph *Potière Ouolove* – was shot at the Exposition ethnographique de l'Afrique occidentale in the Champ de Mars, 1895.[19] In 1900 Regnault published a paper in the bulletin of the Anthropological Society of Paris in which he advocated for the camera as "a laboratory instrument that could fix transient human events and technical functions for further analysis and argued that the celluloid strip with its chemical emulsion was to be the fixing medium of anthropology."[20] He declared that ethnographic museums should incorporate chronophotography and film because "it is not sufficient to possess a loom, a potter's wheel or spears, we must understand how they are used, which cannot be established without chronophotography."[21] This early conceptualisation of film as an intrinsic technology for researching, indeed, comprehending objects in museums was maintained well into the 1930s, with Griaule exhorting the indexical objectivity of film as a research method. As Griaule wrote, "Far from the conjectural approximations provided by the written text photography and cinema give the means of establishing the most independent and impartial documents of the system of ethnographic investigation."[22] This position belies a faith in, and enchantment with, the technical virtuosity of film as a medium, an attitude which I will return to in my discussion of agency.

Masks and cinema as technologies of mediation in Sous les Masques Noirs

Sous les Masques Noirs was made in the late 1930s as part of a museum-funded ethnographic expedition to research the Dogon (the Mission Sahara-Soudan which ran between January and April, 1935) and deals with a Dogon funerary masking ceremony. Released in tandem with Griaule's doctoral ethnography, published as *Masques Dogons* in 1939, the footage was shot by one of Griaule's research assistants, the young cinematographer Roger Mourlan, on 35mm, with the immediate intention of using the footage to analyse performative gestures in a laboratory setting.[23-24] Four years after recording film as data in this initial field research the film, as it was released in 1939, was produced by the cinematographic service of the Colonial Ministry and presented by the Ministry of Culture and the Cinémathèque Française. The footage was edited into the short film we see today to be screened in the museum as an adjunct to the exhibition of Dogon collections, and has been identified as the first French ethnographic film shot in the field.[25-26]

Sous les Masques Noirs is a nine-minute-long précis of the typology, production and performance of masks amongst the Dogon. It opens with consecutive blocks of text situating the Dogon within a French colonial context which presents the role of the administrators as simultaneously protecting "ancient" cultural specificity whilst developing resources to generate wealth for both the domestic population and the empire more broadly. The film then commences in earnest with a shot panning down the cliffs inhabited by the Dogon, and across a plain below. In voiceover, Griaule asserts the alterity of the Dogon, whilst drawing attention to the universality of their concerns, stating that,

> *This documentary aims to show you the birth and life of masks amongst one of the most mysterious peoples of black Africa, located in the cliffs of Bandiagara, south of Timbuktu. Far from foreign, the masks are the result of elevated preoccupations - that venerable worship practiced by almost all of humanity - the cult of the dead.* (my translation)

The film then traces the fabrication of a mask and its accoutrements, following the ritual and technical methods, which range from choosing and felling a tree (after dispelling its resident spirits) to carving and painting the masks and weaving the costumes' auxiliary skirts, bracelets and cap (fig. 109). The film then shifts to the schematic identification of several key types of mask, naming the animals, or social types they represent and noting their specific accessories, such as axes or prosthetic breasts, as they are "modelled" for the camera in front and profile. We then follow their performance through successive stages in mourning and performance of a funeral ceremony. The film is narrated in rapid-fire, (apparently) neutrally observed description by Griaule, and is edited in a similarly staccato pace which destabilises the image and heightens the spiritual, trance-like state associated with the Dogon rituals of masking. The film employs dissonant, rhythmically complex sound (which controls the emotional valence of the footage by veering between sonic caricatures of the exotic and the comedic) and fast-paced montage techniques associated with the coeval French artistic movements of Modernism and Surrealism. Together, these aspects of post-production heighten the singular, or exotic, qualities of Dogon aesthetic practices, whilst simultaneously incorporating them within contemporary Western artistic movements. This transformation of footage from "passive" research data to "active" cinema heightens the dynamics of communication at play in the medium and points to the equivocal nature of "scientific" films, and the fine line between the methods of French Ethnology and the generative montage of surrealism which coexisted in the museum.

The concept of gestural communication was developed in the museum by the archaeologist and paleoanthropologist André Leroi-Gourhan who viewed objects and films as "witnesses to culture."[27] In his magnum opus, *Le geste et la parole*, he argued that man's nature entails an ability to extend his being through his technical objects. Through the phenomenon of exteriorization he detaches himself from his animal condition, out of his body, and from genetics, by developing technical objects that prolong life by means other than life itself.[28] In Leroi-Gourhan's theories of technicity, whereby human biological evolution is intrinsically linked to our technical evolution, tool use is viewed as enabling and provoking shifts in our skeletal structure and linguistic capabilities rather than being caused by them. As subsequently developed by Bernard Stiegler in his *Technics and Time* series, Leroi-Gourhan also conceptualised technology as a prosthesis of human memory. He defines three types of memory; species-related memory, developed and transmitted genetically, or learned through incommunicable individual experience (such as the propensity to grasp thanks to opposable thumbs, or the learned fact that fire will burn), societal memory, gained by experience and passed on individual to individual through language (such as avoiding poisonous food and oral traditions of storytelling), and, finally, mechanical or epiphylogenetic memory, recorded on instruments through which the consciousness of their creator is legible regardless of spatial or temporal context.[29] By this logic, technologies, such as ritual masks and cinema can both be understood as embodiments of memory, provoking understanding and action in individuals who have not necessarily had firsthand experience of the phenomenon they record and communicate.

In more recent years, the notion of objects as mediators has come to the fore of anthropological theory. The work of Alfred Gell, who highlighted the "agency" of objects in eliciting response and action from their viewers, whereby objects function as indexes of external prototypes and mediate relations between their author and recipient, may give us further insight into the dynamics of mediation in *Sous les Masques Noirs*.[30] Gell's diagram (fig. 110) outlines how particular combinations of objects with ideas, makers and recipients can be understood to have different affective powers in the real world. If, then, objects and cinema are considered as technologies of communication, separated from the human agents who bring them into being, their relationship in *Sous les Masques Noirs* becomes a Petri dish in which the two technologies can be isolated and compared.

How do technologies of mediation interact?

We can now consider masks and the film as two interactive forms of technology. To do this, it is useful to ask what goal is shared by the makers of the masks by the filmmaker. One approach is stimulated by Bernard Stiegler, who writes that "technology is a way of revealing. Like all modes of production, it brings into being what is not."[31] *Sous les Masques Noirs* deals with masks, a form of technology, which, like cinema, does not have a materially useful function (like cutting wood, holding liquids or providing shelter). Instead, both masks and cinema act as communicators, linking ideas and experiences between people. The question now is what, in each case, is being brought into being.

In the case of Dogon masks, this entails a conjuring of actual, but incorporeal spirits from throughout the Dogon ecological and social system, with the intent of transforming the spirit of a recently dead person into that of an ancestor, and, in so doing, cementing bonds amongst the community of the living.[32] Griaule's film operates with not dissimilar prerogatives; to capture and reproduce the essence of a distant (and, to those in France, fetishized, but intangible) culture, through its manifestation in the concrete objects of masks, and, in so doing, to affirm the bonds of a shared humanity. This recognition of equivalence gives a point of entry to explore the dynamics of masks and film in terms of the construction of otherness.

Masks are liminal objects, often produced and performed in various cultures at times of transition, such as that between life and death in the Dogon funeral recorded in *Sous les Masques Noirs*. This quality of mutability makes them powerful objects, precisely because their appearance occasions irregular states of being, both for the performer and the viewer.[33] As mediators between two states, Dogon mask makers and dancers use gestural communication, which is registered in the form the mask as an object, and animated by exaggerated movements in performance to communicate a duality of being that is close to impossible to articulate in language. Cinema too is a medium that can reveal states of being beyond lived reality through its capacity to conflate, transport and make connections between space and time through montage and projection. In his book *The Cinema, or the Imaginary Man* the philosopher, sociologist and filmmaker Edgar Morin identifies a similar dynamic in the doubling inherent in the cinematic image. He describes the photograph as resembling universal mental products, containing "the genes of the image (the mental image) and […] myth (the double), or, if we prefer, […] image and myth in a nascent state."[34] This conflation of viewers' internal mental images and a broader, shared imaginary is furthered in his discussion of cinema as existing in a place between subjectivity and magic, which he describes as "an uncertain nebula, which goes beyond man, without, however, detaching itself from him." By this logic, masks and cinema are technologies which both catalyse equivocal and immersive participatory states of being between personal, visceral engagement and broader, universal experience in a divided, but cohesive whole. The inherent duality in this whole opens a space where incommensurable states can, temporarily, coexist and be experienced.

To explore this dynamic further, masks and cinema can then be understood as what Alfred Gell has termed "technologies of enchantment" reliant on the "enchantment of technology," where technical processes mesmerise us and allow us to perceive another dimension within the world that is usually hidden.[35] In Gell's discussion he considers all forms of art as "components of a vast technical system." In this system, "the power of the object stems from the technical processes it embodies."[36] Here, the craft of a maker (or the commissioner) of an enchanting object has indirect power over the observer who is mesmerised by the technical system they behold. In the case of masks, this enchanting technical process involves a vacillation between concealment of the "agent" (who is the performer who conjures the mask) and revelation of the mask's "patient" (or the audience who is acted upon). The mask, as an object, mediates between the two. In this dynamic, the individual performer of a mask controls this technology of revelation, whilst simultaneously being subsumed, or veiled by it.

In the narration of *Sous les Masques Noirs*, Griaule states that boys dancing hare spirits wear the "anonymous uniform of their ancestors" (my translation). This statement implies that the identity of the producer of this enchantment "disappears" behind their technology, and, in the context of the choreographed funeral dances in the film, becomes a part in a much larger communal whole. Griaule heightens this in the framing and editing of the film, which fragments bodies to conflate individuals into a mass. Cinema, too, can be understood as another component of Gell's overarching technical system, with a similar dynamic of concealment and revelation. Cinema's infinitely detailed, but narrow field of vision appears eidetic, whilst simultaneously constructing and reproducing experiences distinct from lived reality, concealing more than it shows. Griaule, the maker of this film, is rendered invisible, whilst also being understood to control the form of the vision. This is evident in his authoritative voiceover, and a fleeting and oblique shot of him interviewing an older man that both reveals his craft and legitimises his statements.

In cinema, an audience is given a vision of the world perceived through the lens of what Jean Epstein termed a "mechanical brain, a machine eye."[37] This, too, is a revelation of an enchanted "reality" that elides its own production and construction – namely, vision without ego. By showing both the technical production and animation of the masks, Griaule attempted to capture the enchantment of technology. The machine eye of the camera, however, is only capable of recording the surface of masks, not their spiritual dimension. Thus, even with the imposition of montage and sound to structure the image, masks' meaning remains elusive. This dynamic can also be understood in terms of the mutual exclusivity of "aura" and "technical reproducibility" in Walter Benjamin's *The Work of Art in the Age of Mechanical Reproduction*.[38] In Benjamin's discourse, the aura, or "authenticity" of an object is tied to its presence in "time and place" as well as its ritual context.[39] According to Benjamin, works of art can accrue a provenance spanning different auratic states across numerous ritual contexts – for instance, an ancient statue made for pagan, cultic purposes could then be worshipped in a Christian context, and again valued by a "cult of beauty" in a museum.[40] The specific, anti-formalist stance of the scientific branch of the Musée de l'Homme, however, rejected that an object's aura could derive from its aesthetic presence alone, separate from its original cultural context. As we saw in Griaule's discussions on the appreciation of pottery in *Documents*, the community of the museum asserted that "the thing out of place is never the real thing."[41] Though Benjamin declared that mechanically reproduced images, typified by cinema, eradicate the aura of an object, the museum was, in fact, using film to *reassert* the "authentic context" of masks, reuniting them with an aura. This quest was, by Benjamin's reckoning, simultaneously negated through the technology of cinema, but exemplifies the complex relationship between communicative artefacts in the museum.

So, what is it that happens when one technology of mediation looks at another? And what does this mean for the museum's goal of revealing shared humanity through Griaule's film? In *Sous les Masques Noirs*, an understanding of the Dogon is simultaneously revealed and concealed by the communicative capacity of both masks and cinema as they coexisted in the Musée de l'Homme, and still do in the Musée du quai Branly – Jacques Chirac. This can be understood as a form of twinning, not evoking identicalness, but rather a split between halves of a whole system, which connote and reflect each other in equilibrium without forming a perfect or static binary.[42] This is a generative relationship, which speaks of a much larger system of human technical endeavour. This paper has explored this dynamic of concealment and revelation in Griaule's film and in technologies of mediation more generally. By discussing the methodological schisms at the heart of the museum's vision of communicating shared humanity, Griaule's film can be seen to embody the divisions and vacillation at the heart of the institution. What does become clear, however, is an understanding of shared dynamics of technological mediation. This transcendent link between the technologies of masks and film reveals that there is an innate desire to express the intangible through technology that is shared by peoples throughout space and time.

Illustrations

108. *Sous les Masques Noirs* (Marcel Griaule, 1939).
109. *Sous les Masques Noirs* (Marcel Griaule, 1939).
110. The Art Nexus from Alfred Gell, *Art and Agency: An Anthropological Theory*, Clarendon Press, Oxford 1998, p. 29.

Notes

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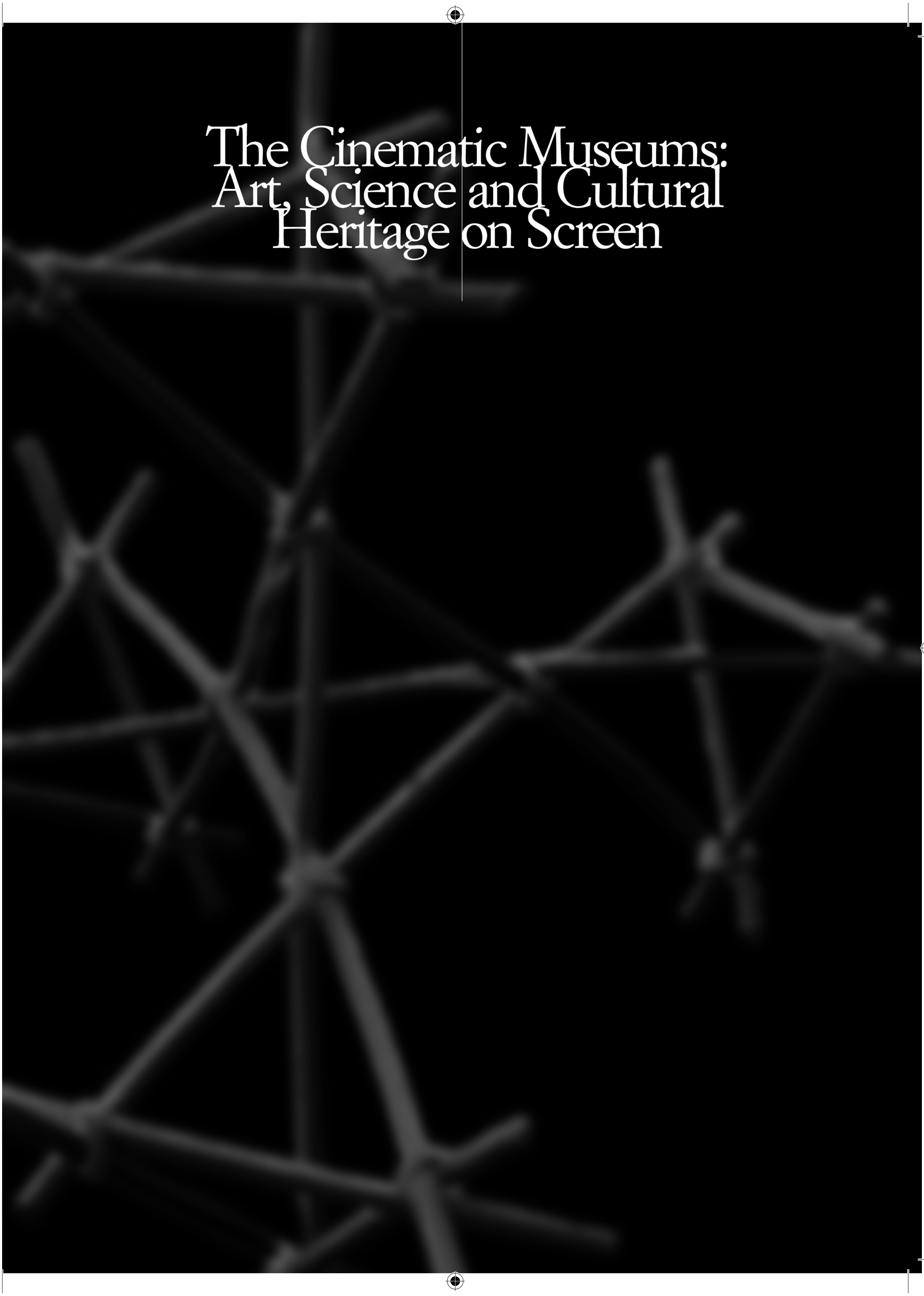
The Cinematic Museums: Art, Science and Cultural Heritage on Screen



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The Exhibition Space as Cinematic Space: Film as Museum Object

Film Museums: What to exhibit and where

When thinking about the exhibition of film, the image that instantly springs to mind is of a cinema with rows of seats facing a large screen at the end of the room on which the moving images unfold. But film, as a medium, an art form, an industry and a part of cultural heritage can also be “exhibited” in other ways: it can be an object in a museum or an exhibition devoted to the theme of film, notably in film museums.

Film museums – as we understand them – are situated between cultural-history museums and art museums but leaning more towards the former one,[1] and we claim that they can be more than just museums in the form of a cinémathèque-like cinema whose exhibition space is equated with the cinema space. Film museums as we define them dedicate themselves not only to the history of filmmaking but also to the entire phenomenon of film as a cultural product, a product of everyday life, an art form in its own right and a part of our cultural heritage.

For a long time, those kind of film museums that house not only a cinema but an actual exhibition space answered the question about their actual exhibits, the objects on display, as follows: “...it is almost impossible to present film *as film* in a fully satisfactory way, film museums have to look for other ways to exhibit the subjects,” claimed the then director of the Filmmuseum Düsseldorf, Sabine Lenk, still in 2006.[2] These “other ways” are presentations of film-related materials, associated objects from the production process or things that directors and film stars once used.

To put it in an exaggerated way: Film museums only showed objects that, in an art museum, would correspond to showing Van Gogh’s paint brushes, as the former director of the German Film Museums in Frankfurt, Claudia Dillmann, used to say.

> *To avoid walking into this trap, the Austrian Film Museum in Vienna, for example, claims that the only place to exhibit film is the cinema. Of course, a cinema space is essential for a film museum. But there is good reason to argue emphatically for the possibility (and legitimacy) of presenting film as film – in the form of excerpts or film clips or even entire films – and not by proxy in a film museum’s exhibition space. We do so by drawing from both film history and museum theory – and from our own experience as curators at the Deutsches Filmmuseum in Frankfurt.*[3]

So, what is it we are exhibiting when we present cinematic images or film *as film* in the exhibition space? What kind of transformation do our exhibits, the *cinematic objects*, go through in the process of selecting and exhibiting? What “happens” to them and their ontological and epistemological status? And, on a perceptive level: What effect does this have on the audiences? What is the goal the curators and the museums want to achieve and what purpose do the cinematic objects serve to achieve these goals?

Presenting cinematic objects *in the exhibition space*

Since 2006, the year Lenk declared exhibiting film clips impossible, the technical possibilities for bringing filmic images in the exhibition space have improved dramatically due to availability of better and cheaper digital projection technology. But these new possibilities make new demands on, and require new ways of thinking about the presentation modes and the ethics of exhibiting moving images in a museum space. First of all, the curator and hence the visitors have to be aware that moving images on display can have a double role: that of exhibits, of museum objects, on the one hand, and on the other, that of a means of explaining and at the same time mediating the filmic and other material exhibits. Whereas the former, moving images as exhibits, mostly consist of excerpts and clips of pre-existing films that put the film itself on display, the latter consist of any kind of explanatory material associated with the former, such as interviews with cast and crew or behind-the-scenes materials. They provide context in the same way the afore-mentioned production related to non-film objects, such as scripts, props, film posters or set photos do.

One strategy to differentiate between these two functions of moving images in the exhibition space would be to strictly present the moving images serving as *cinematic objects* projected on big screens, while those moving images serving a mainly explanatory function could be shown on smaller monitors.

Films as "Museum Things" from a film studies and a museological point of view

As museums are commonly expected to show original and unique objects, what can be considered as original and authentic with regards to cinematic images in the exhibition space? How do they differ from other museum objects (like for example a Greek vessel or an ancient seal in an archeological museum)? Or do they really differ *at all*?

What sparks the confusion about the object status of film first of all is the fact that the material side of the object is perceived as fragmental, or better, kind of unstable. You can touch a Greek vessel but you cannot touch the film clip on display; it is merely light on a screen, a time based-experience of movement that – especially when projected digitally – lacks the materiality of the objects.

So, you could argue that exhibiting film is something totally different from exhibiting other objects. This would hence implicate that the concept of a museum object of material culture does not apply to film, and that films differ profoundly from any other item in a museum collection. Because of the particular character of the projection, film could not be an *object* and hence not an *exhibit* in the classical museum space.[4]

But film does indeed have a material basis and film museums in particular have to take this into account and show film from its original material basis.[5] For us, this is an important point for the exhibition of film in a cinémathèque-like cinema, but we argue strongly for treating the exhibition space as a different space, a different setting, and finally a different *dispositif* with a different set of rules that allow for different ways of presenting film. To overcome this confusion about the nature of film it is in our case helpful to look at the different definitions of "film" (archival film) that Giovanna Fossati crafts in her milestone book *From Grain to Pixel*:[6] the "film as original"-framework stresses the material basis of film and defines it as a material object with which the historical film artifact is the carrier of the film's authenticity. On the other hand, the "film as *dispositif*"-framework allows for the experience of film within other *dispositifs* than the classical traditional one of the cinema.[7] More recently Fossati has added the "film as performance"-framework[8] which highlights the fact that every exhibition of a film is a new and unique kind of performance and hence a "new" film.

Within these two last frameworks of film as *dispositif* and performance, film has – as every performance art – no single original.[9] With film being an experience of projected images whether digital, analog, nitrate of acetate, everything is a recreation and hence an original in its own right. The aura or the feeling of authenticity is not tied to the material basis but created with and in a special *dispositif*.[10] Within this definition of film here is no need for a material object to make film a "proper" museum exhibit.

Another main reservation film museums exhibiting film in the museum space face is that most of the time excerpts of films – deliberately chosen clippings of certain scenes that serve the curatorial statement of the exhibition – and not complete films are used. This is what the German Filmmuseum does most of the time.[11] The use of excerpts – i.e. fragments of film works – in a film museum context has provoked some criticism.[12] But a closer look at what a museum object is by consulting museological theory will again reveal that difference between material objects and projected film in the exhibition space is not so much fundamental as rather gradual, especially when it comes to excerpts and fragments of film.

An exhibit or a *museum thing* ("Museumsding" as Gottfried Korff, one of the leading German museum theorists has put it) is in the classical sense on the one hand a physical object, a material artifact, that can be put in a showcase. But inseparably linked with the materiality is the mediality of the object. According to Korff they are "tools of communication" in the sense of media, in that they are mediating between the visible and the invisible, "between the materiality of the viewable and the immateriality of the memorable."[13] Museum objects are charged with meaning.[14] But they are always taken out of their original context that once bestowed further meaning on them. The new context of the exhibition and the way in which the object is displayed sometimes try to reproduce this meaning, and sometimes even create a new or a particular meaning in the first place.

So, any object exhibited in a museum is fragmental in its memorable quality even if its materiality is fully preserved. Hence, presenting fragments, parts representing a whole, is a common practice in museums; it is the norm more often than not, and re-contextualizing its exhibits is necessarily part of any exhibition development. In this respect, film does not differ too much from a Greek vessel: even if this vessel is physically complete, scholars sometimes do not know what it "meant," if it was a drinking device or a cult object. It is the task of every museum to first mark and subsequently fill and explain and interpret these blank spaces.

In the case of our *cinematic objects* – the excerpts of films the curators chose to present in the exhibition – we suggest understanding them as and calling them *references* as they always refer to the complete film. As the fragmentary character of the film excerpts is not hidden, the visitor understands that there is more to watch in the cinema beyond the exhibition space.[15]

With all this in mind, one might even argue that exhibiting films "works better" than exhibiting other material objects: historical objects that have been put away into showcases behind glass are deprived of their original use and meaning – people do not drink from the vessel anymore – whereas film in an exhibition space is on display and at the same time ready to be used as intended: the visitor is still able to watch the film in its intended form as a projection of moving images on a screen in the exhibition space as well as in a cinema screening.[16]

To sum up: viewed from the film as dispositive or film as performance point of view exhibiting film or film excerpts as *cinematic objects* in an exhibition space does not fundamentally differ from exhibiting other historical objects. Film is for the most part subject to the same transformations of the object as any other artifact in the museum.

In order to exemplify the use of films and especially excerpts of films as cinematic objects in the context of an exhibition outlined before, we will introduce some practical applications and experiments that we have been conducting in the German Filmmuseum over the past seven years. Each of these examples makes extensive use of carefully selected and extracted film clips. But what they actually intend to achieve, and how they do this, differs greatly in terms of the choice, compilation and intention of the clips' arrangement.

EXAMPLE 1. Film excerpts as cinematic objects and museum exhibits: The Film Room at Deutsches Filmmuseum Frankfurt / Core Exhibition (2011/2016)[17]

What we refer to as the "Film Room" is a space within the exhibition space, "an exhibition within an exhibition" (fig. 111): four large-scale screens constituting a rectangular shape that is open on one side for the audience to be seated. This installation is positioned in the middle of the exhibition space, and it is the first thing visitors see on entering the exhibition.

The four screens show a curated compilation referring to the topics of the surrounding exhibition and dealing with "filmic language," breaking this topic down to the themes of acting, sound, image and editing. The conceptual focus on the perception of film is reflected in the compilation, to the extent of creating its structure.

More precisely spoken: the subtopics of each section, e.g. acting, "costume," "makeup," "mimics/gesture" and "stars" are illustrated with corresponding excerpts of movies. Those excerpts originate from a wide range of times, countries and genres, of iconic as well as less-known scenes, thus in total representing a cross section of film history. The same will be applied to the other sections, for sound, image and editing, thus creating 60 minutes of complementing and immersive "cinema-like" experience. Using the clips for backing up the permanent exhibition's arguments, and editing them by joining visually connected clips, thus nearly creating a flow of narration within the narration, one could call the film compilation here a video-essay in space.

This leads back to the question of space: by bringing moving images into the exhibition space, it is no longer a white cube, while on the other hand, it is not a cinematic black box[18] either. We would argue that the exhibition space hovers somewhere in the middle.

The arrangement of the Film Room also serves to guide the attention of the viewers: alternating the content on the screens directs the visitors' gazes and leads the audiences towards the intended understanding, partly by means of a physical experience, almost a re-enactment of extreme camera-angles or editing techniques.

Each film not only stands for itself, but gains a wider context through its placement within the compilation, as well as through the relationship to the surrounding museum objects, the exhibition. Each clip is thus situated purposefully to illustrate a pre-destined meaning (an historical epoch, a technical particularity, the produce of handicraft). What actually happens is that each viewer produces new meanings due to the particular use of the fragment through new editing. This could mean acknowledging an actor's versatility through seeing him in very different roles presented parallel on the four screens, pursuing the sound of rain through different raining scenes with the sound jumping from screen to screen, or splitting a scene's editing by screening every piece on another screen, thus dissecting the editing in a very understandable way. We would call this principle "comparative viewing," where our curatorial offer meets the viewers' own memories and interpretations, where the curator's approach of siding (very) different excerpts refers to the viewer's perception: so what is a rather educational concept to begin with, turns into an interactive screening that catches the viewers' attention through more than just moving images on the screens, it engages them into film perception.

Space, Dispositif and Perception

Putting films and film excerpts as exhibits into the exhibition space raises question, especially about the nature of the two distinct exhibition spaces: the cinema and museum space.

When talking about cinema space and the exhibition space, it is quickly assumed that these two places are two distinct "visual arrangements," as Thomas Elsaesser has put it in an article about exhibiting Ingmar Bergmann and his works, with two very distinct modes of reception and audience involvement, often expressed with the terms black box and white cube.[19] It is along these lines that our own approach of analyzing perception as oscillating in between education and immersion (see later in the essay) sets its anchor.

As film is a linear medium, with a distinct beginning and end, the cinema space adapts that. By contrast, the exhibition space can be explored in non-linear ways. Their respective relationship to the perception of time is different: the cinema-goer exists virtually out-of-time, he is passive, and he stays involved as long as the film is running. Whereas in the museum, the visitor is exposed to numerous visual attractions that vie for his/her attention. The museum visitor can choose what to look at and for how long.[20] The visitor acts like a flaneur who gets distracted by various visual attractions. But this dichotomy of passive reception in the cinema and active reception in the museums is not so clear-cut. Just think about the cinema-goer and spectator of early cinema: they would come and go in the middle of a programme, more flaneur-like than what later became the habit of spectators at the cinema. And for most of the 20th century, a visit to a museum was equated with contemplation and absorption in the art work – what will be questioned later as the two concurring modes of perception, "immersion" on the one hand and "education" on the other, takes its starting point already here: apparently, there is not *one* mode of perception, neither in the cinema nor in the museum.

Coming back again to Fossati's notion of "film as *dispositive*" we, like her, follow Frank Kessler's initial suggestion of introducing a widened concept of the *dispositif* in terms of a historical pragmatics that allows to read every presentation of historical films as a time- and place-specific relation between film, viewer and viewing context.[21] Consequently, Kessler argues in favor of the coexistence of a large variety of *dispositifs* each with their own pragmatic framework over time. And since there is not, nor has been one normative *dispositif* that could somehow be re-created either in a museum or in a cinémathèque-like cinema, museum and exhibition spaces are free (if not *in need*) to create their own museological *dispositif*.[22] Or as Giovanna Fossati in regards to archival and restoration practices: "From the *film as dispositif* perspective, showing a film within a different *dispositif* than its historical one also becomes an equally important option."[23]

Furthermore, over the past decades the ways of watching films have been fully differentiated; film has been "re-located," as Francesco Casetti and others have argued.[24] By taking into account that watching films has been spread across various spaces, devices and media, one might even argue that cinema space and museum space are converging. They converge from two sides: film consumption has become less passive, more mobile, somehow placeless, more flaneur-like, whereas a visit to a museum today has become sometimes all the more of a social event, a collective experience, shared in person or via social media – so, the habits and position of the spectator have changed alike.[25]

Under this premise one could even say: the cinema space in a cinémathèque-like cinema or other places of archival screenings no longer have much in common with the cinema space in a modern commercial multiplex cinema, although they share the same spatial arrangement. And even if – from the point of view of "space" – the *cinema as film museum* and *the exhibition as film museum* are rather different, they are also quite alike in terms of their respective modes of perception, i.e. the *dispositif* in the broadened sense. Both viewers and visitors expect that the things they are going to watch have a certain meaning, a certain purpose in the overall concept of the exhibition, respectively in the overall context of the film programme or series. Both in those thematic film programmes and in these exhibitions about film, the films and film clips have been carefully chosen with regard to a topic of film history, a certain period or the œuvre of a filmmaker or a special genre that they want to highlight.[26]

EXAMPLE 2. Education by means of the two different dispositifs: FILM NOIR! *(2012)*[27]

The principle of comparative viewing has also been applied to the second temporary exhibition after the re-opening of the Deutsches Filmmuseum: *FILM NOIR!* was dedicated to the particular *noir* style, and visualizes the various components of this style in different compilations on several screens.

But the arrangement differed from the installation in the core exhibition: each topic had its own screen – its own cinematic object, one could say, with the screens hanging freely in the space, and which in detail were compiling clips dealing with "camera angles," "light and shadow," "image framing" in the area of technical particularities, and "narrative structure," "city as actor" and "noir characters" for "narrative appearances" in the area dedicated to narrative means.

The design of the spaces also referred to classical noir-settings, such as Street at Night, Detective's Office, and Living-Room (fig. 112).

Apart from moving images/cinematic objects, there were very few objects in the exhibition space; just a few posters and photographs (fig. 113).

For the compilations, the curators Jule Murmann and Stephanie Plappert chose more than one hundred clips from fifty-five different classic *films noirs* with the programmatic aim of achieving a "picture analysis in moving images." They wanted to present film (clips) as exhibits, they wanted to tell the content through moving images, and they wanted to raise awareness for the style of *film noir* in a way that would "prepare" audiences for their next visit to the cinema. In short: a rather educational approach, using the objects themselves, i.e. films, as arguments to tell their own story.

The compilations, together with the scenography (by chezweitz & partner, Berlin), created a very particular atmosphere: not cinematic at all, in the sense of not imitating the cinema space. But still, by recalling inner-filmic appearances, like sets, the scenography reverberated the deconstructed stylistic devices on the screen: while the film clips mainly served educational purposes, audiences nevertheless experienced the space as being "in between" cinema and exhibition. So in this example, film as exhibit was echoed by the space around it, thus creating a perceptional tension oscillating between conscious and subconscious perception.

The exhibition prepared its visitors for their next visit in the cinema, it nearly served as an instructions manual for the *Noirs* running in the accompanying film programme – whilst, at the same time, it offered assistance for a more general awareness of filmic means and language. So in this case, the two *dispositifs* intertwined seamlessly – the more, as the accompanying cinema programme was very well visited.

Two sides of the same coin: Education and Immersion

The last example has already touched on two main objectives the German Filmmuseum tries to achieve with its exhibitions (as well as with the cinema programme and all its other activities): education, learning and gaining knowledge about cinema, and immersion, experiencing with all senses and being fascinated by cinema.

So how is the question of education and immersion, of fully and with all senses engaging in an overwhelming experience, linked to the different *dispositifs*, the cinema and the museum space?

One might easily assume that the distinct cinematic quality of immersion cannot be achieved in a museum space. And in the afore-cited article, Sabine Lenk actually bluntly negates the possibility of cinematic immersion in the museum space because of the very nature of the exhibits which she mainly considers to be artifacts from the production process of a film. She argues that even if an exhibition includes filmic image these are just fragments of films (in non-cinematic quality and size). Moreover, these clippings constitute only *one* element in the overall layout of the museum. Therefore, the visitors are not getting drawn into the film, especially its narration, and feel an urge to "move on" and "see the rest of the museum."[28]

According to Lenk, the purpose of the film clips in the exhibition can therefore only be educational. They can be explanatory tools (and no exhibits in their own right) and thus take on a documentary character: "In the permanent or temporary exhibitions of a film museum, the selected scenes turn into 'demonstrations' or 'history' for the visitor. The cinema-goers watching the same scenes in a cinema experience them as fictional 'presence' and reality, until the show is over," Lenk writes.[29]

We hold, however, that although the visitor might not be drawn into the *narrative* or *diegetic* universe of a single film, he can certainly be drawn into the *cinematic* universe as a whole (i.e. the cinematic universe of a certain period, a certain director or a certain canon of films). Needless to say that immersion as we understand it *can* happen in the museum space.

Besides, immersion and education are not the opposite ends of a spectrum. At least not in a cinema museum, as Henry Langlois already stated more than half a century ago. He claimed that a successful cinema museum has to "immerse the viewer in a succession of atmospheres," meaning that the exhibition rooms and its scenography have to put the spectator in the right "mood" to experience, feel and hence "understand and better sense the works which are shown."[30] He calls this "education through osmosis,"[31] a knowledge gain that doesn't derive from learning facts but through a deeper understanding through the senses.

The kind of immersion Langlois refers to is similar to the kind of immersion we talk about; except to the fact that we think that the "atmospheres" he talked about can not only created by the set-up of the rooms but also by the cinematic objects – the film excerpts projected on large screens in these rooms – themselves.

EXAMPLE 3. A specific kind of immersion RED in film *(2017)*[32]

The exhibition *RED in film* was dedicated to a filmic stylistic device widely neglected in film perception: the color red. The exhibition focused on audience perception, investigating the use of red in film and dividing the topic into three fields: film characters, spaces and directors.

Eleven projections, running for 5 to 8 minutes each, dealt with applications of red in film, such as in costume or in set design. The screens were arranged separately, with the exception of the central area, where four screens formed an architectural body – a room – dedicated to the architectural functions of red: the so called Red Room (fig. 114).

The screens were complemented by further layers: to include the process of film-making, additional presentations (approx. 2-3 minutes each) illustrated the choices film-makers would make in terms of color. Those were projected on the floor and with a piece of paper, a "screen-to-go," audiences could catch the presentation projected top-down (fig. 115). Contents included quotes by film-makers, sketches and photographs of their working process and results. The most important limitation was not to use moving images here.

A third layer appealed to the visitors' subconscious (reflecting the way color operates): a sound and light-installation gave expression to subtle associations of red, evoking warmth and cold, comfortable sounds alternating with metallic noises, quiet phases with overwhelming sound design. At a given moment at the end of one projection cycle, the whole room was flooded with red light and a loud soundscape.

With respect to the film compilations in RED, there is a difference compared to the ones mentioned earlier. Here, it was not any visual markers that motivated the montage of the single film clips – the aim was not to generate a steady "flow of images" – but the editing, adhering to a logic set by the content of the clips.

Thus the spectators receive a different impression: even though the editing does not support their narrative immersion, the visitors are surrounded by light, color and images, even becoming part of the images in the Red Room; the visit is a very physical experience. And the compilations still activate the personal film memory, recall a kind of "cinema history of the mind." Thus, the audience's attention and consciousness are directed towards the particular language of film color; they will watch films differently in the future.

The relationship between the floor-projections and the wall-projections seems to be an interesting subject for closer exploration, particularly because of their formal similarity as projections: their function must be seen as inverting the usual logic of the presentation of objects and film. In a traditional exhibition, 3D and 2D-objects such as costumes or set design-drawings would have been shown, all with respect to their informative value regarding the choice of color.

Instead what was done was to shift all this as images (two-dimensional digital copies) to the top-down projections. Those were, additionally, "hidden," accessed only through a sheet of paper to be held beneath the beam. Thus, the first thing a visitor would see on entering the exhibition was *not* a strong 3D-object in a show case, but a strong projection on a screen, illustrated and explained by the top-down projections. The visitor is hereby directed even more towards a mode of perception resembling the cinematic one, while at the same time being introduced to truly cinematic objects. So far, *RED* has been the most consistent approach to presenting film as exhibit.

All three case studies presented here play within the ranges of immersion and education. There is a path to immersion also in a film museum – but it is a different one: the visitor is not only pulled into a narration, but is literally embraced by moving images. It is a truly visceral experience.

Our contribution to the ongoing discussion about exhibiting film as film could therefore be summarized as follows:

1. Films are exhibitable in the form of cinematic objects: film as exhibition object does not differ fundamentally from other objects in a museum. Hence, film "belongs" to a museum just as much as any other object from material culture does or does not.
2. There are different ways of "using" film clips within a compilation. From the examples given above, there are at least three different modes to be construed:

a) purely illustrative: the film clips support or a statement or illustrate the use of a certain object, a costume, prop etc., throughout the film, or they may be used as a simple display for aesthetic pleasure (not applied at the Deutsches Filmmuseum)
b) visually composed "narratives" that lead visitors' attention to a certain meaning, aesthetic or technique within film (Film Room, *FILM NOIR!*)
c) film as an exhibit, not as a way of showing something (predestined), but as an auratic object presented with all the particularities immanent in the medium (*RED in film*).
3. According to these various uses, the function of exhibiting film varies, floating freely on a scale in between immersion and education. The exact effect depends on many factors, but mostly on the way the compilations on display are edited.
4. Comparative viewing dissolves the linearity to which the cinematic experience is otherwise bound, and sharpens the visitor's eye and mind for the "full experience," for seeing film in the cinema. This is where everything comes to full circle: The walk through the exhibition must point the way to the cinema, as Henry Langlois already claimed decades ago.[33]

This also leads the way to the core assumption that exhibiting film in an exhibition space is by no means a substitute for watching the film in a proper projection in the cinema. Instead film exhibitions in the museum space can bring formerly unseen or unexpected meanings, readings, ideas and connections to the surface that are already inherent in the film work. Or as Thomas Elsaesser put it, they can "constitute both a new form of cinephilia and a new hermeneutics of close reading."[34]

Illustrations

111. Film Room, core exhibition of Deutsches Filmmuseum (2011). Photo: Deutsches Filminstitut / Uwe Dettmar.
112. Streetscene in *FILM NOIR!* (2012), Deutsches Filmmuseum. Photo: kubix.
113. View of *FILM NOIR!* (2012), Deutsches Filmmuseum. Photo: kubix.
114. *RED in film* (2017), Red Room. Photo: Deutsches Filminstitut / Uwe Dettmar.
115. Top-down projection in *RED in film* (2017). Photo: Deutsches Filminstitut / Uwe Dettmar.

Notes

[1] On the position of film museums, especially the Nederlands Filmmuseum, between cultural-history institutions and art museums cf. Bregt Lameris, *Film Museum Practice and Film Historiography. The case of the Nederlands Filmmuseum (1946-2000)*, Amsterdam Univ. Press, Amsterdam 2017, pp. 13-15.
Our paper deliberately does not discuss the exhibition of moving images as an art form in an art museum context, that is, in the sense of expanded cinema, video art, gallery cinema or artist's cinema. Visual art museums face completely different mindsets and modes of perception; and appreciating art is something entirely different from exhibiting film as an art form AND as a phenomenon of cultural history, as a commodity, as an industry. For film in the context of art museums or the *cinema as film museum* framework cf. among others Paolo Cherchi Usai (ed.), *Film curatorship. Archives, museums and the digital marketplace*, Synema, Wien 2008 and Erika Balsom, *Exhibiting cinema in contemporary art*, Amsterdam Univ. Press, Amsterdam 2013.

[2] Sabine Lenk, "Collections on display: Exhibiting artefacts in a film museum, with pride," in *Film History*, vol. 18, no. 3, 2006, pp. 319-326, here p. 320.

[3] Interestingly enough, this topic (the various possibilities of exhibiting in the exhibition spaces of museums dedicated solely to the art, history and cultural phenomenon of film) has been a widely neglected topic, with only a few publications dealing exclusively with the subject: Cf.

Dominique Païni, *Le Temps exposé: Le cinéma de la salle au musée*, Cahiers du Cinéma, Paris 2002; Hans Christian Eberl (ed.), *Museum und Film*, Turia und Kant, Wien 2003; Andrea von Kameke, *Film Museums as "Cinematic" Spaces?*, in Alice Autelitano (ed.), *The cinematic experience. Film, contemporary art, museum*, Campanotto, Pasian di Prato 2010, pp. 223-232. Most recently Bregt Lameris, *Film Museum Practice and Film Historiography*, cit., esp. chapter 9, where Lameris elaborates on how the film museum practice of the Nederlands Filmmuseum shifts to notion of film as performance art in the 1990s, a thought that will also here become relevant later.

[4] Cf. for example, Winfried Pauleit, *Kino / Museum. Film als Sammlungsobjekt oder Film als Verbindung von Archiv und Leben*, in Viktor Kittlausz, Winfried Pauleit (eds.), *Kunst - Museum - Kontexte. Perspektiven der Kunst- und Kulturvermittlung*, transcript, Bielefeld 2006, pp. 113-135, here 116.

[5] The Austrian Film Museum is especially vocal on this point.

[6] Giovanna Fossati, *From Grain to Pixel. The Archival Life of Film in Transition*, Amsterdam Univ. Press, Amsterdam 2011, chapter 2: Theorizing Archival Film, pp. 103-145.

[7] We will elaborate more on the concept of the *dispositif* later in our text.

[8] Giovanna Fossati, "Multiple Originals. The (Digital) Restoration and Exhibition of Early Films," in André Gaudreault, Nicolas Dulac, Santiago Hidalgo, Pierre Chemartin, François Albera (eds.), *A Companion to Early Cinema*, Wiley-Blackwell, Malden 2012, pp. 557-558.

[9] The question of the concept of the original is a highly debated one among film scholars, film restorers and film curators and dealt with in numerous publications. As some examples that also apply the concept of the dispositive to clarify the concept of the original cf. again Giovanna Fossati, *From Grain to Pixel*, cit., and Vinzenz Hediger, *The Original is always lost. Copyright Industries and the Problem of Reconstruction*, in Marijke de Valck (ed.), *Cinephilia. Movies, Love and Memory*, Amsterdam University Press, Amsterdam 2005, pp. 135-149.

[10] Authenticity is an equally important and vague, hence much debated museological concept. For a basic discussion cf. Constanze Hampp, Stephan Schwan, "The Role of Authentic Objects in Museums of the History of Science and Technology. Findings from a visitor study," in *International Journal of Science Education, Part B*, vol. 5, no. 2, 2013, pp. 161-181, DOI: 10.1080/21548455.2013.875238; Martin Sabrow, Achim Saupe et. al. (eds.), *Historische Authentizität. Eine Publikation des Leibniz-Forschungsverbunds Historische Authentizität*, Wallstein Verlag, Göttingen 2016.

[11] Except for the part of the core exhibition dealing with media history before cinema and early cinema, where short films from the first 15 years of films history are shown in their entirety. Due to this limited time span early films work well in an exhibition context. Regarding the restauration and subsequent exhibition of early film cf. Giovanna Fossati, "Multiple Originals. The (Digital) Restoration and Exhibition of Early Films," cit., pp. 550-567.

[12] Michael Loebenstein, *Lebende Ausstellung, Wunderkammer, Notation. Über das Filmmuseum als Ort der Filmvermittlun*g, in Bettina Henzler, Winfried Pauleit (eds.), *Filme sehen, Kino verstehen. Methoden der Filmvermittlung*, Schüren, Marburg 2009, pp. 201-215.

[13] Gottfried Korff, *Die Eigenart der Museums-Dinge. Zur Materialität und Medialität des Museums*, Kirsten Fast (ed.), *Handbuch der museumspädagogischen Ansätze*, Leske + Budrich, Opladen 1995, p. 22 (our translation).

[14] Anke te Heesen, *Exponat*, in Heike Gfrereis (ed.), *Museen verstehen. Begriffe der Theorie und Praxis*, Wallstein, Göttingen 2015, p. 35; Krzysztof Pomian, *Der Ursprung des Museums. Vom Sammeln*, Wagenbach, Berlin 1988.

[15] Bregt Lameris and before Nanna Verhoeff express similar thoughts when talking about the preservation, restauration and use and presentation of the Bits & Pieces collection of the EYE. But unlike the deliberately chosen excerpts of films the German Filmmuseum uses the materials found in the Bits & Pieces are fragments of films in the first place. Bregt Lameris, *Film Museum Practice and Film Historiography*, cit., pp. 115-116 and Nanna Verhoeff, *The West In Early Cinema: After the Beginning,* Amsterdam Up, Amsterdam 2006, chapter: Bits & Pieces, pp. 25-44.

[16] In the Deutsches Filmmuseum, every exhibition is accompanied with an extensive film program, thus offering the "real experience" for the excerpts presented in the exhibition space.

[17] Film Room at core exhibition Deutsches Filmmuseum, 2011/revised 2016. See also: https://deutsches-filminstitut.de/en/filmmuseum/permanent-exhibition/, last visit 12 June 2018.

[18] For the importance of these concepts, see next chapter.

[19] Thomas Elsaesser, "Ingmar Bergman in the museum? Thresholds, limits, conditions of possibility," in *Journal of Aesthetics & Culture*, vol. 1, no. 1, 2009, DOI: 10.3402/jac.v1i0.2123.

[20] Volker Pantenburg, "Migrational Asthetics. Zur Erfahrung in Kino und Museum," in *Montage A/V, Erfahrung,* vol. 19, no. 1, 2010, pp. 37-53.

[21] Kessler elaborated on this in several publications: cf. for example Frank Kessler, "Programming and performing early cinema today. Strategies and dispositifs," in Martin Loiperdinger (ed.), *Early Cinema Today. The Art of Programming and Live Performance*, John Libbey, New Barnet 2012, pp. 137-145 and Frank Kessler, "The cinema of attractions as dispositive," in Wanda Strauven (ed.), *The cinema of attractions reloaded*, Amsterdam Univ. Press, Amsterdam 2010, pp. 57-69. Cf. also Bregt Lameris, *Film Museum Practice and Film Historiography*, cit., pp. 125-150.

[22] Frank Kessler, *Programming and Performing Early Cinema Today. Strategies and Dispositifs*, cit., p. 139.

[23] Giovanna Fossati, *From Grain to Pixel. The Archival Life of Film in Transition*, cit., p. 127.

[24] Cf. for example, Francesco Casetti, "The relocation of cinema," *Necsus*, no. 2, 2012, https://necsus-ejms.org/the-relocation-of-cinema/, last visit 8 May 2018.

[25] Thomas Elsaesser, "Ingmar Bergman in the museum? Thresholds, limits, conditions of possibility," cit., p. 5.

[26] Lameris stresses the structural resemblance of programming in/for cinema and curating in a museum space. Films shown in a topical programme influence each other's perception in the same way that films and objects in a museum space bestow each other with further meaning when they are presented in an "in context-presentation" (Kirshenblatt-Gimblett), cf. Bregt Lameris, cit., p. 151-153. For a more detailed approach to "programming" as a concept and a technique – especially in regards to early cinema – and its implications, cf. Andrea Haller, Martin Loiperdinger, "Stimulating the Audience: Early Cinema's Short Film Programme Format 1906-1912," in Martin Loiperdinger (ed.), *Early cinema today. The art of programming and live performance*, John Libbey, New Barnet 2012, pp. 7-21 and Andrea Haller, "Das Kinoprogramm: Zur Genese und frühen Praxis einer Aufführungsform," in Heike Klippel (ed.), *The Art of Programming. Das Programm in Geschichte, Theorie und Praxis*, LIT-Verlag, Münster 2008, pp. 18-51.

[27] *FILM NOIR!* Exhibition at Deutsches Filmmuseum Frankfurt, June 22nd to October 14th, 2012, https://deutsches-filminstitut.de/filmmuseum/ausstellungen/sonderausstellung/film-noir/, last visit 12 June 2018.

[28] Sabine Lenk, "Collections on display: Exhibiting artefacts in a film museum, with pride," cit., p. 320.

[29] *Ibidem*. For a more detailed examination of Lenk's ideas and the question of immersion both in the cinema and in the museum cf. also Andrea von Kameke, *Film Museums as "Cinematic" Spaces?*, cit. Her book chapter also elaborates and challenges some of the assumptions of Volker Pantenburg in his afore-cited article (footnote 5).

[30] David Robinson, "Film museums I have known and (sometimes) loved," in *Film History: An International Journal*, vol. 18, no. 3, 2006, pp. 237-260, here 244.

[31] *Idem*, p. 245.

[32] *RED in film*. Exhibition at Deutsches Filmmuseum Frankfurt, March 8th to August 13th, 2017, http://rot.deutsches-filmmuseum.de, last visit 12 June 2018.

[33] Cf. http://www.kunst-der-vermittlung.de/dossiers/filmvermittlung-und-filmmuseum/museen-im-film/, last visit 12 June 2018.

[34] Thomas Elsaesser, "Ingmar Bergman in the museum? Thresholds, limits, conditions of possibility," cit., p. 9.

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Le Cinéma dans trois expositions patrimoniales françaises

Le propos de notre séminaire annuel « *history of cinema wirhout names* » en cette année 2018, sous un titre qui peut prêter à confusion (*Exposing the Moving Image*), n'était pas de revenir sur les problèmes d'exposition et de scénographie déjà bien traités ailleurs, mais de voir comment l'émigration du cinéma hors de ses territoires d'origine peut poser de nouvelles questions à l'écriture de son histoire.

Je vais aborder cette problématique à travers trois expositions françaises dont le sujet et/ou le commanditaire étaient extérieurs au monde cinématographique. Il s'agissait de la BNF par son département des manuscrits, du Centre des monuments nationaux et de l'INRAP.[1] Aucun des trois lieux choisis pour ces expositions n'avait non plus rien de cinématographique dans sa vocation : la Très Grande Bibliothèque François-Mitterrand à Bercy, La Salle de garde de la Conciergerie (monument historique) et La Cité des Sciences à La Villette (tous trois situés à Paris).

Le cinéma s'y trouve pris dans un champ englobant : le mythe culturel, le patrimoine architectural, l'archéologie. Dans les trois cas, ce qui est en jeu c'est la notion de patrimoine. Patrimoine matériel : architecture (*monuments*), archéologie (*quoi de neuf… ?*), manuscrits (*Arthur*) ; patrimoine immatériel : le concept de *monument historique*, la *légende* d'Arthur, le *mythe* du Moyen Age.

Ce qui est encore en jeu et qui nous intéresse ici, c'est l'entrée du cinéma dans ces champs patrimoniaux.[2] La question est celle du statut qu'on lui accorde : est-il là simplement pour élargir le champ iconographique par le biais de films institutionnels ? Ou a-t-on recours à la galaxie audiovisuelle pour renouveler la médiation vers l'objet central de l'exposition afin toucher de nouveaux publics, de rendre l'approche d'un sujet aride plus attractive ?

Pour nous, une autre question se pose qui n'était peut-être pas prévue au départ. Placer le cinéma dans ces cadres inhabituels a pour résultat d'imposer un renouvellement du regard sur lui et conséquemment sur son histoire.

La Légende du Roi Arthur

Cette exposition était une initiative du nouvel établissement culturel rennais *Les Champs Libres*.[3] Selon la présentation d'Anne-Hélène Rigogne, coordinatrice du service des expositions :

> *l'idée initiale était celle d'un cycle d'expositions bien différenciées dans leurs propos, mais qui permettraient de mutualiser à la fois les savoirs, les collections, les expériences en action culturelle.*
> *L'exposition « Le roi Arthur, une légende en devenir », qui eut lieu à Rennes du 15 juillet 2008 au 4 janvier 2009, avait*

> *comme objectif de revenir sur la figure du roi Arthur et d'explorer les croisements entre les sources anciennes et les adaptations tardives du mythe, essentiellement au XIXe siècle et aujourd'hui.*
> *L'exposition de la BnF, elle, fut définie comme devant donner la primauté aux textes et aux manuscrits qui ont alimenté ce mythe littéraire fécond, et privilégier l'époque médiévale.*
> *La troisième eut lieu à la médiathèque du Grand Troyes en mars 2011, elle est revenue sur les sources de la légende arthurienne, mais en la recentrant sur l'œuvre de Chrétien de Troy.*
> *Parmi les écueils possibles, étaient identifiés : « le caractère très abondant de cette collection ; un sujet connu de tous qui prête à rêver – avec des risques de déconvenue – ; le fragile équilibre à maintenir entre le souci d'être accessible et la tenue scientifique du propos, la complexité de l'histoire de ces textes mythiques ».*[4]

Le visiteur était tout d'abord accueilli par une projection d'extraits de films et téléfilms bien connus, de *Merlin l'enchanteur* à *Kamelott.* On peut relever le caractère très classique de cette sélection qui pratique une découpe dans l'histoire du cinéma de 1952 à 2009 en incluant une série télévisée.[5]

> *[Le visiteur entrait] ensuite dans une forêt bleutée, peuplée d'arbres et de figures arthuriennes, et suiv[ait] un sentier sinueux qui l'invitait à passer de clairières en clairières. La forêt était faite de voilages et de bannières textiles, servant de simple cloisonnement, de supports de texte, ou encore de décors réalisés avec des photographies de forêt ou des détails d'enluminures. Le cheminement, sur une moquette vert pré, était tracé au sol et permettait d'aller de vitrine en vitrine, celles-ci étant quelquefois assemblées en « tables rondes ».*
> *En revanche, dans la dernière partie de l'exposition, qui était consacrée à la diffusion de la légende arthurienne dans les bibliothèques princières, l'alignement des vitrines était volontairement plus sage, comme dans un scriptorium. Enfin, le parcours de l'exposition s'achevait sur un espace vide faisant fonction de sas, où seule trônait l'épée du roi Arthur fichée sur son rocher, avant de proposer un retour à notre époque avec un salon de lecture et de consultation multimédia où le visiteur pouvait trouver des preuves de la persistance du mythe dans la production éditoriale actuelle.*
> *Entre autres stratégies de médiation du mythe, la projection de courts extraits de films, dès l'entrée de l'exposition, avait pour objectif de montrer au visiteur combien la légende arthurienne fait déjà partie de sa culture. Les images d'Excalibur et les facéties du Monty Python Sacré Graal ont ainsi ravivé les couleurs des héros de la légende, tels Merlin, Arthur, Lancelot ou Guenièvre, et contribué à stimuler l'imaginaire des visiteurs.*[6]

La référence au cinéma venait donc à l'entrée et à la fin de l'exposition, dans les prolongements à titre d'ouverture. Le dispositif restait basique : des extraits de films commerciaux proposés en boucle et projetés sur des écrans que l'on voyait en passant : pas d'installation pour s'asseoir.
On peut déceler une double intention. Pédagogique : partir de la culture du visiteur lambda d'aujourd'hui. Iconographique : ayant déjà acté une première extension par les illustrateurs modernes (on y avait vu par exemple Gustave Doré), on voulait en suggérer une deuxième par les images de cinéma les plus connues dont certaines ont pris un statut d'icônes (par exemple l'affiche d'*Excalibur*).

Monuments, stars du septième art

Le titre le disait, le cinéma, cette fois, occupait une position centrale. Le commanditaire de l'exposition est le centre des monuments nationaux. Le cinéma est a priori extérieur à son champ, mais le responsable de l'institution a joué le jeu. Il a lancé un appel d'offre et a retenu un spécialiste de cinéma.
N. T. Binh (actuellement maître de conférences à Paris 1) était alors (et est toujours) rédacteur à *Positif.* Comment a-t-il été désigné commissaire de cette exposition ?[7] Il l'avait déjà été pour celle sur Prévert à la Mairie de Paris quoique nullement spécialiste de Prévert. D'autre part, il a une certaine expertise dans le domaine des décorateurs de cinéma. A *Positif* il avait notamment réalisé un long interview de Wakhevitch.
C'est un bon point pour le Centre que d'avoir choisi un spécialiste de cinéma qui ne l'était pas des monuments nationaux. L'exposition s'adressait ainsi davantage au spectateur de cinéma qu'au spécialiste d'architecture.
Le cinéma était omniprésent, mais par une entrée inhabituelle qui faisait sortir de la politique des auteurs en donnant au monument un rôle actif, en faisant de lui une des « fonctions actancielles » du film (je présente mes excuses pour cette expression un peu raide mais exacte). Le choix de films avait été déterminé par un

critère simple : c'était ceux dans lesquels le rapport au monument joue un rôle important, compte non tenu de la valeur intrinsèque du film en tant qu'« œuvre » et son importance supposée dans l'histoire du cinéma. On se trouve tout à fait dans la perpective de *history without names*.

Binh affirme, « en assumant [son] anthropomorphisme », que « le monument est un acteur ».[8] Il présente ensuite les « chapitres » de l'exposition comme suit.

– le monument comme personnage historique, « partenaire des figures historiques de la grande histoire ». Par exemple dans le film *Vatel* de Roland Joffé (2000), le château de Maisons-Laffitte *jouait* Chantilly – comme le château de Mirement *jouait* Versailles dans la *Marie-Antoinette* de Sofia Coppola (absent de l'exposition parce qu'il ne fait pas partie des monuments nationaux).

– le monument personnage de fiction : la cathédrale Notre-Dame de Paris dans les diverses adaptations du roman de Victor Hugo.

– le monument « acteur de composition » entendons par là qu'il *interprète le rôle* d'un autre monument : la Cité de Carcassonne dans le rôle de Beauvais dans *Le Miracle des loups* (les deux versions) ou les remparts d'Aigues-Mortes dans celui d'Orléans dans la *Jeanne d'Arc* de Marc de Gastyne.

– le monument « guest star », c'est-à-dire apportant des traces du passé dans les films contemporains (*Un Américain à Paris*).

– le monument fantasme ou imaginaire : celui des films d'animation de Disney par exemple.

D'autre part l'exposition attirait l'attention sur le fait que le film est une création collective. Il n'existe pas d'auteur unique. Binh ne récuse pas pour autant la politique des auteurs mais il réhabilite l'apport créatif des chefs décorateurs.

En-dehors de courts extraits de films, présentés en projection sur un mur (la scène de la Marseillaise dans le *Napoléon* de Gance) ou sur des bornes vidéo, l'exposition proposait surtout des documents de type divers appartenant au péri-filmique : photos de repérages, photos de plateau, photos de tournage. Ces documents sont « plus révélateurs » que le film lui-même. L'accès au filmique passait donc par une double, voire une triple médiation.

Cela revenait à prendre en compte la dimension génétique. S'agissant des décors, l'exposition montrait lesquels ont été rejetés et lesquels ont été finalement acceptés. « Quand on n'a que le résultat, on ne sait pas tout ». « L'aboutissement ne suffit pas à rendre compte de l'œuvre ». « C'est comme un iceberg, il y a une grande partie invisible ».[9]

Néanmoins le plan de l'exposition est jalonné de références à des acteurs et des réalisateurs. Le parcours ainsi dessiné trace une géographie inusuelle de l'histoire du cinéma. En outre, le cadre dans lequel on cheminait était lui-même un monument historique : la Conciergerie. C'est un cas unique ou presque d'adéquation entre le lieu et le thème.[10]

La dialectique immobilité/mouvement sur laquelle butte toute exposition consacrée au cinéma trouvait sa résolution : le monument est immobile mais il doit se parcourir pour être bien vu, le cinéma est mouvement mais on s'immobilise pour le regarder. On parcourait aussi des reconstitutions de décors, on pouvait s'y filmer. La Conciergerie fonctionnait à la fois comme cadre et comme scénographie : on se déplaçait dans les salles et on y rencontrait des décors entiers (celui de *Perceval*) qu'on pouvait visiter, parcourir, comme les acteurs l'avaient fait. Dans certains décors étaient placés des découvertes et des transparences (Azay le Rideau vu à travers les vitres d'une 2CV). Le visiteur pouvait « s'intégrer » dans un film de Méliès.

Un auteur par excellence : Rohmer, était le « héros (paradoxal) de cette exposition » en raison de ses deux choix différents et audacieux pour *Perceval le Gallois* et *L'Anglaise et le Duc.* Pas de monument réel ni reconstitué dans ces deux films mais des espaces fabriqués pour le tournage par Jean-Pierre Cohut-Svelko pour *Perceval* et Jean-Baptiste Marot et Antoine Fontaine pour *L'Anglaise et le Duc*.

Cette exposition attirait l'attention sur « ce que ça montre » plutôt que « de quoi ça parle ».

Quoi de neuf au moyen âge ?

L'affiche de cette exposition, qui montre un individu casqué d'un heaume fermé nanti d'écouteurs, s'affichait littéralement « branchée ».

L'initiative de l'exposition appartenait à la Cité des sciences et de l'industrie. L'INRAP (Institut national de recherches archéologiques préventives) n'était pas commanditaire mais partenaire.

La Cité des sciences et de l'industrie avait précédemment présenté une exposition « *Gaulois, une exposition renversante* » déjà en partenariat avec l'INRAP d'octobre 2011 à août 2012. Elle a rencontré un public nombreux. Forte de ce succès, l'institution parisienne a décidé de programmer avec le même partenaire « *Quoi de neuf au Moyen âge ?* » une exposition grand public qui affirmait « vouloir s'adresser aux familles, à un public jeune, qui vient en groupe, récréative et pédagogique plutôt que « savante »[11] ; elle recourait, en partie, à l'interactivité. Le sous-titre était « *tout ce que l'archéologie nous révèle* ».

Une abondante équipe avait en charge la préparation et l'organisation (la Cité des sciences est une grosse structure)[12] à laquelle il faut ajouter un prestigieux et abondant comité scientifique dans lequel on relève le nom de Patrick Boucheron.

Mme Gouy est muséographe. Elle définit son métier comme de la médiation.[13] Sa tâche est de « transformer en exposition un message » concernant un sujet. La philosophie de cette exposition sur le cinéma est claire : il est avant tout un vecteur. On est dans la médiation culturelle et la communication plus que dans le cinéma comme culture, encore que… nous nuancerons cette première impression. Le « message » en question, indiqué par le titre, c'est de « proposer un Moyen Age inédit ».[14]

L'exposition était disposée sur deux étages. Le deuxième seul nous concerne. Il était divisé en six îlots thématiques dont voici les titres :

Quelles populations sur quels territoires ?
Les campagnes au quotidien
Des hommes, des paysages et des ressources
Les élites au Moyen Âge
Voyages et échanges
Les villes du Moyen Âge

L'exposition avait une vision extensive du domaine cinématographique. Mais on n'y confondait pas cinéma et audiovisuel comme on va le voir. En fin de compte, le septième art était très présent dans une exposition où sa place n'allait pas de soi et elle y était peut-être mieux problématisée qu'ailleurs.

On y trouvait d'abord une référence ponctuelle au *cinéma institutionnel*, celui que le public connaît. On pouvait se faire photographier avec Ivanhoé et Rebecca (Robert Taylor et Elizabeth Taylor). Ludique et populaire, cette installation renvoyait à un dispositif archaïque des débuts de la photographie, des foires où les Surréalistes ou Jean Cocteau pratiquaient ce jeu.

Sur des petits écrans étaient diffusés des *films institutionnels* réalisés pour l'INRAP sur des sites archéologiques mais remontés pour l'exposition : par exemple *le village et la rivière* sur le site de Saleux en Picardie, mêlant prise de vues sur le chantier de fouilles et figures animées incrustées. On dépassait ainsi la forme classique dans une exposition de ce type (tous les musées d'archéologie le font). Il n'y avait pas la sempiternelle « vidéo » projetée souvent dans un espace exigu et dont le son gêne tout le monde, qui est la plaie fréquente de ces expositions.

Un *film de commande* (*Fabuleux fabliaux*) avait été réalisé en réponse à un appel d'offre. C'est un film d'animation produit par « les Chevreaux Suprématistes » et réalisé par Renaud Chabrier. Celui-ci est auteur, dessinateur et réalisateur, et « cherche principalement comment le dessin et l'animation peuvent aider la transmission scientifique, en utilisant les techniques traditionnelles aussi bien que numériques ».[15] Il avait déjà réalisé pour l'exposition « Gaulois » un film court *Tintignac, la dernière cérémonie*. Pourquoi du cinéma ? Pour ménager une pause. Ce court film (6 minutes) était diffusé dans un petit espace fermé spécialement dévolu (une quinzaine de places), où l'on devait s'asseoir, une parenthèse dans le parcours forcément itinérant que requiert une exposition. Il était présenté par un jongleur en hologramme.

L'exposition était largement organisée autour de la fresque de Matteo Lorenzetti *Les Effets du bon et du mauvais gouvernement* du Palais communal de Sienne (1338), œuvre ultracélèbre et beaucoup commentée en particulier, dernièrement, par Patrick Boucheron dans son livre *Conjurer la peur* (2016) qui sortait au moment de sa préparation. La fresque a fait l'objet d'une animation discrète des multiples figures qui la peuplent, selon un procédé mis à la mode par un certain cinéma d'art : *Breugel, le moulin et la croix*, de Lech Majewski (2011), *La Passion Van Gogh*, Dorota Kobiela et Hugh Welchman (2017). Il faut dire que le *Bon gouvernement* de Lorenzetti est volontiers cité comme un exemple de pré-cinéma.[16] De même, le recours à l'animation est un classique de l'évocation du Moyen Age : qu'on pense aux intermèdes animés des deux *Brancaleone* de Monicelli et de *Monty Python and The Holy Grail*, ou à la référence à la Tapisserie de Bayeux dans plusieurs films comme *A Walk With Love and Death* (*Promenade avec l'amour et la mort)* de John Huston : la forme des marionnettes en tricot qu'on trouve dans le film de Renaud Chabrier renvoie à cette technique de fabrication d'images. Cette référence implicite au « cinéma avant le cinéma » est peut-être un subterfuge pour rendre acceptable la présence des images animées dans une exposition consacrée au Moyen Age. L'animation reste minimale, en deux dimensions, avec des mouvements réduits sans doute par respect pour l'œuvre originale et pour ne pas trop s'éloigner du Moyen Age.

L'exposition de la Cité des sciences mettait enfin en œuvre des techniques contemporaines pour un usage en interactivité.

Trois « personnages » en hologrammes (Arégonde, Hildegarde de Bingen, Guillaume le Maréchal) ont été retenus et placés dans des lieux spécifiques au début, au milieu et à la fin. Un « castelet » et un capteur de présence activaient les hologrammes. Ces personnages s'adressaient au visiteur à la première personne. Doit-on rapprocher cet usage de la vogue récente des hologrammes depuis la campagne électorale de Jean-Luc Mélenchon en 2017 ?

D'autre part, un dispositif interactif sur les « terres noires »[17] se donnait pour objectif de « montrer comment les sciences de l'archéologie et les nouveaux protocoles mis en place ont donné une nouvelle lecture de l'histoire des villes ».

Le visiteur était devant un écran qui permettait de voir à travers un bac rempli de terre. Dès qu'il touchait une partie de l'écran, une séquence audiovisuelle se déclenchait.

Un commentaire et un dessin animé expliquaient ce que sont les terres noires.

Pour compléter l'ensemble des dispositifs, un « ciné-débat » autour d'un film de répertoire, un « film d'auteur », *The Pied Piper* de Jacques Demy (1972), était proposé au public dans un auditorium avec présentation et discussion,[18] selon la formule traditionnelle d'un ciné-club. Il est intéressant d'y entendre le point de vue de l'archéologue (Séverine Hiard, INRAP) sur un film « historique » (légendaire plutôt), d'ailleurs équilibré par celui d'un spécialiste de cinéma et de communication (Solal Albélès, laboratoire de médiévistique occidental de Paris). Le propos de l'archéologue sur le film n'est pas le moins pertinent. Elle applique fort bien les principes de Marc Ferro[19] désormais consensuels auprès de la communauté des historiens du cinéma.

De ces trois expositions, celle qui interpellait le plus notre problématique était celle émanant du lieu le plus éloigné a priori du cinéma, du moins du cinéma considéré comme art : celle de la Cité des Sciences. Mais il faut se hâter d'ajouter que c'est l'aspect technique et technologique des images animées qui préparait ce lieu à aborder ces questions et qu'il ne s'y est pas limité. Maud Gouy déclare : « les artistes ont toute leur place dans un musée des sciences ».

Conclusion

Dans ces expositions « patrimoniales » ce qui a été évité – plus ou moins bien – c'est le collage. Le cinéma y était une pièce à part entière. Il fallait gérer des problèmes d'espace et de temps que Dominique Païni[20] avait pointés naguère, qu'on peut résumer sous forme d'oppositions binaires. La mobilité variable du visiteur d'exposition *vs* l'immobilité du spectateur de cinéma traditionnel. Le statisme du document patrimonial *vs* le mouvement de l'image de cinéma. Le désir de sortir le cinéma de la salle *vs* celui de rester fidèle à son dispositif de base : écran, salle, sièges, obscurité.

Elles ont permis de désacraliser l'œuvre filmique en l'arrachant à son cadre académique, de la « désengluer » selon l'expression de Païni.

L'histoire du cinéma est guettée à son tour par ce qui a étouffé l'histoire de l'art : la dépendance chronologique, la surdétermination géo-culturelle des nations, l'explication psycho-biographique, le sacro-saint respect du contexte, les genres, et les périodisations empruntant à des processus caricaturalement biologiques.[21]

> *Aujourd'hui, au seuil du XXI siècle, alors que l'on assiste à une migration massive des images en mouvement des salles de projection vers les espaces d'exposition, migration portée par la révolution numérique […], il devient possible, voire nécessaire, de redéfinir le cinéma hors des conditions d'expérience qui auront été les siennes au siècle précédent, c'est-à-dire non plus du point de vue restreint de l'histoire du cinéma, mais, à la croisée du spectacle vivant et des arts plastiques, d'un point de vue élargi à une histoire générale des représentations.*[22]

Ces expositions « excentrées » nous permettent d'avancer, bien mieux que consacrées à un cinéaste ou à un courant, qu'« un accrochage muséographique produit de l'histoire, ou plutôt, d'autres histoires, d'autres enchaînements ».[23] Resterait à faire ce travail et à voir quelle(s) forme(s) d'histoire elles produisaient.

Remerciements : N. T. Binh, Maud Gouy

Illustrations

116. *La Légende du Roi Arthur* : « De l'histoire à la littérature » (diapo 3) expositions.bnf..fr/arthur/index.htm. Catalogue de l'exposition : *La Légende du Roi Arthur*, Paris BNF / Le Seuil 2009.
117. Exposition : *La Légende du Roi Arthur*.
118. *Monuments, stars du septième art* : Affiche de l'exposition (diapo 10).
119. *Monuments, stars du septième art*.
120. « Le monument comme personnage de fiction » : *Notre-Dame de Paris*, film de Jean Delannoy (diapo 13).
121. Charte des auteurs.
122. *Quoi de neuf au moyen age ?* : Affiche de l'exposition (diapo 23).
123. Réactivation d'un dispositif archaïque : « Se faire photographier avec Ivanhoé et Rebecca » (diapo 26).
124. Un dispositif ultra-moderne : Hildegarde de Bingen en hologramme (diapo 38).

125-126. Chercher loin les racines du cinéma : l'animation de la fresque de Ambrogio Lorenzetti *Les Effets du bon et du mauvais gouvernement* (palazzo Comunale di Siena) (diapo 36 ou 37).

Notes

[1] BNF : Bibliothèque Nationale de France. INRAP : Institut National d'Archéologie Préventive. Références des trois expositions : *La Légende du Roi Arthur*, Bibliothèque Nationale de France, Paris, BNF François Mitterrand, 20/10/2009 – 24/01/2010 ; *Monuments, stars du 7ème art*, Centre des monuments nationaux, Paris, La Conciergerie (salle des gardes), 29/10/2010 – 13/02/2011 ; *Quoi de neuf au Moyen Age ?*, INRAP, Paris, Cité des Sciences, 11/10/2016 – 06/08/2017. J'ai eu la possibilité de dialoguer avec deux des trois commissaires et j'avais contribué un peu à celle de la Conciergerie.

[2] Sur le cinéma comme patrimoine, je renvoie aux bons auteurs : Jean-François Leniaud, *Les Archipels du passé*, Fayard, Paris 2002 ; Dominique Païni, *Le Temps exposé, le cinéma de la salle au musée*, éd. Cahiers du cinéma, Paris 2002.

[3] « Les Champs libres explorent de nouveaux territoires de la culture, des sciences et de la société. Equipement culturel inédit dans le paysage culturel français, Les Champs Libres regroupent en un seul lieu le Musée de Bretagne, musée d'histoire et de société, l'Espace des sciences, centre de culture scientifique, technique et industrielle, et la Bibliothèque à vocation régionale », www.leschampslibres.fr, dernier accès 5 février 2018.

[4] expositions.bnf..fr/arthur/index.htm, dernier accès 24 janvier 2018. Catalogue de l'exposition : *La Légende du Roi Arthur*, BNF/Le Seuil, Paris 2009.

[5] *Knights of The Round Table*, Richard Thorpe, 1952 ; *The Sword in The Stone*, Wolfgang Reitherman, 1963 ; *Monthy Python and The Holy Grail*, Terry Gilliam, Terry Jones, 1975 ; *Perceval le Gallois*, Éric Rohmer, 1975 ; *Excalibur*, John Boorman, 1981 ; *First Knight*, Jerry Zucker, 1995 ; *Kaamelott*, Alexandre Astier, Christophe Fort 2009.

[6] expositions.bnf..fr/arthur/index.htm, dernier accès 24 janvier 2018.

[7] Conversation avec N. T. Binh le 30 janvier 2018.

[8] N. T. Binh, « Histoire monumentale », dans le Catalogue de l'exposition, *Monuments, stars du 7ème Art*, éditions du Patrimoine/Centre des Monuments Nationaux, Paris 2010, pp. 16-22, ici p. 18.

[9] Conversation avec N. T. Binh le 30 janvier 2018.

[10] On pourrait citer d'autres exemples d'expositions dans des monuments historiques mais il est exceptionnel qu'elles soient autant en adéquation avec le cadre. L'Institut Jean-Vigo de Perpignan, après « le cinéma s'affiche en grand » dans le décor majestueux du palais des rois de Majorque en 2015, a proposé « les Aventures maritimes » au château royal de Collioure en 2018 : par les baies on voyait le port. (Catalogues édités par Arnaud Bizalon à Perpignan). Ici même Dominique Païni a présenté l'exposition qu'il a conçue sur « Godard / Picasso », à l'abbaye de Montmajour dans l'été 2018, jouant sur l'asyndète entre le lieu et le thème qui réitérait en quelque sorte la dichotomie entre les deux personnalités présentées.

[11] Communiqué de presse, juillet 2016, consultable sur le site cite-sciences.fr, d'où proviennent, sauf indication contraire, les autres citations intégrées dans ce texte.

[12] Commissaire scientifique : Isabelle Catteddu. Commissariat : Maud Gouy, Evelyne Hiard, Evanthia Ioannidou, Dorothée Vatinel, Sabine Belloc. Scénographie, graphisme et design des éléments d'exposition : Lucas Triboulet. Suivi de l'audiovisuel : Violette Araujo, David Bento.

[13] Entretien téléphonique avec Maud Gouy, le 30 janvier 2018.

[14] Communiqué de presse *ibid.* cf. note 11.

[15] Site www.renaudchabrier.com, dernier accès 30 janvier 2018.

[16] De nombreux auteurs ont cherché à repérer le « cinéma avant le cinéma » dans les œuvres plastiques du passé, remontant jusqu'aux peintures rupestres de Lascaux comme Marc Azéma, *La Préhistoire du cinéma*, éd. Errances 2011. Voir ma note critique dans *1895*, n° 69, 2013, pp. 169-172.

[17] « En archéologie, le terme de 'terres noire', usité depuis les années 1980, désigne une strate d'une épaisseur variant de 0,6 m à 2 m, succédant directement aux derniers dépôts antiques Après des découvertes récentes (2004), les archéologues ont modifié leur opinion sur les terres noires. Ils pensent maintenant que cette couche noire longtemps considérée, à tort, comme une 'absence' d'activité humaine, correspond en fait à une phase de forte urbanisation et d'activité en matériaux putrescibles ». http// www.cite-sciences.fr/fr/au-programme/.../quoi-de-neuf-au-moyen-age/lexposition/, dernier accès 1 février 2018.

[18] Consultable en ligne.

[19] Le fameux article de Marc Ferro « Le film, une contre-analyse de la société » (1971) maintes fois réédité, avait imposé l'idée qu'un film « historique » parle davantage du présent de son époque de réalisation que de l'époque qu'il prétend représenter.

[20] *Le Temps exposé, le cinéma de la salle au musée*, Cahiers du cinéma / Essais 2002.

[21] *Idem*, p. 126.

[22] Philippe-Alain Michaud, *Le Mouvement des images*, catalogue de l'exposition du Centre Pompidou 2006, p. 16.

[23] Dominique Païni, *Le Temps exposé, le cinéma de la salle au musée*, cit., p. 15.

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Exposed Auto-Mobility: Self-Driving Cars on Stage

"The future is now": this slogan opens the BMW live multimedia show performed at the International Automobile Exhibition in Frankfurt in September 2017, a show that presents an interesting case with regard to the use of cinematic modes for displaying the novelties of automobile technology in a trade fair context. In addition to that, for the majority of the audience who attended the show, including me, it was the first live encounter with the automobile technology that promises to radically change the near future of mobility and urban environments: self-driving cars. This technology has long been depicted in cinema narratives, from science fiction films to fantasy films and beyond. In some cases a self-driving car is personified as one of the main characters, as in the examples of Herbie, the Volkswagen Beetle in *The Love Bug* (Robert Stevenson, 1968), the speaking car KITT from the TV series *Knight Rider* (1982-1986), and the Batmobile in the different versions and spin-offs of Batman films and TV shows – *Batman* (Leslie H. Martinson, 1966), *Batman* (Tim Burton, 1989), *Batman Forever* (Joel Schumacher, 1995).

Inspired by the BMW multimedia show and building upon it, the aim of this paper is twofold: to reflect on the use of audiovisual displays for presenting automobile technologies in exhibitions and trade fair contexts as well as to consider the interrelation between self-driving technologies and audiovisual technologies. The connections between cars and media have been largely explored in film and media studies.[1] Self-driving cars pose new challenges in this regard. They are more than media of urban mobility: they become media environments in which diverse audiovisual configurations take places. I intend to examine these configurations in the paper as follows. In the first part I discuss the aesthetics of the BMW multimedia show and the way self-driving cars are presented in this particular exhibition context: here I reflect on how the configuration of the multimedia show can be interpreted as mirroring the configuration of self-driving cars. In the second part I examine different levels of interaction between audiovisual technologies and self-driving technologies, while in the final part I point out some considerations on the relation between humans and machines in the media ecosystem of the future traffic environment.

The BMW multimedia show at the 2017 International Automobile Exhibition in Frankfurt

The International Automobile Exhibition, also abbreviated from the German *Internationale Auto Austellung* as IAA, is one of the oldest and most important international motor shows worldwide. All the main car manufacturers and players of the European automobile market participate every year at the IAA showcasing new models and technologies. The first IAA was actually held in Berlin in 1897: the exhibition moved to Frankfurt in 1951 and has since taken place at the Frankfurt Trade Fair venue every year. The city of Frankfurt has indeed a long tradition as a trade junction and meeting point for merchants and businessmen: from the Middle Ages, trade fairs were hosted twice a year at the Römer, the main square in the city centre, until 1909, when they were moved to the Festhalle Frankfurt, near the central train station. Now the Frankfurt Trade Fair, also known as Frankfurt Messe, is said to be the world's largest trade fair, conference and event organiser, with its own exhibition grounds, comprising an indoor area of 367,000 square metres divided into eleven halls. The two main events organised by the Frankfurt Trade Fair are the Book Fair and the International Automobile Exhibition. The latter is the trade show in Germany attracting the most visitors: the last show, the 67th IAA held from 14-24 September 2017, registered 810,400 visitors according to the organisation.[2]

All eleven halls of the Frankfurt Messe were used as exhibition space on this occasion. The BMW exhibition occupied the entire space in the large hall number 11. The first part of the hall was dedicated to the exhibition stand, where car models where displayed and could be accessed directly by the audience: here people were allowed to enter the cars, touch them, play with some features, and take photos inside and next to them. Behind the stand area, a big semi-circular arena was installed to host the multimedia show. The audience area enclosed a large stage, in which eleven big screens of different dimensions were placed.

Unlike other multimedia shows at the IAA where people pass by and stop at their discretion, the BMW show was framed in a cinematic set-up: it had a clear beginning and end, and the audience had to enter the arena and take a seat before the spectacle, during which the lights were dimmed. The show lasted 19 minutes overall and was aimed at presenting two technologies: electric cars of the BMW-i series, and prototypes of self-driving cars. Self-driving cars were certainly the show's main attraction: at the time of writing, BMW is testing 40 prototypes of self-driving cars in Munich; the company announced it will start production and launch the first self-driving cars in 2020-21.

In the following paragraphs I thoroughly analyse the multimedia show with the aim of investigating to what extent, by presenting a product for marketing purposes, the configuration of this show also reflects some key points for considering self-driving cars as a medium between mobility and visuality. In the multimedia show set-up, the three biggest screens were fixed – placed on the stage to form a semicircle, as in a Cinerama cinema. The other nine screens were mobile: they were suspended from the ceiling in three rows and moved up and down during the show. The screens showed car commercial videos with the typical iconographies of car advertisements: cityscapes, traffic, cars going down streets, landscapes, and shiny, happy, busy people. Cars also drove onto the stage and circumnavigated the audience area thanks to a ramp structure connecting the stage to the audience area. Accompanied by electronic music, the BMW show can be described as a choreography of screens, cars and humans. The movement of the mobile screens was coordinated with the movement of the cars coming on stage. The spotlights added beams of light to the movement of the cars and screens, with the video images reflected on the translucent stage (fig. 127).

I focus my analysis at this point on the segment from minute 3.30 to 6,[3] in which self-driving cars were exhibited and displayed. The three big screens showed the skyline of a modern city featuring examples of contemporary architecture. This was accompanied by loud rhythmic music. While a white BMW i3, an electric city car, arrived on stage, five screens were lowered from the ceiling: the lateral ones showed close-ups of young men and women, while the central screen transmitted images from a live camera shooting the car arriving on the stage. A woman in her twenties wearing a t-shirt and sneakers got out of the car. She touched her smart watch and indicated the way to the car, which exited the stage moving alone (fig. 128). The live video in the central screen alternated images transmitted from an external camera that followed the car from outside and a camera placed inside the self-driving car; the latter one showed that nobody was sitting in the car – the steering wheel was moving alone, guiding the car along its trajectory (fig. 129).

After driving along the ramp that circumnavigated the audience area, the car entered the stage again and disappeared behind the central screen. Meanwhile the three fixed screens showed eight BMW i3 self-driving cars: they moved in choreographed patterns. Two gold-painted BMW i8 coupés driven by two young men came onto the stage; the self-driving BMW i3 reached them and parked itself right between them. At this point, the choreography on stage mirrored the choreography on screen; the cars on stage and the ones on screen were aligned in two rows and vanished in a coordinated manner. This choreography was followed by a scene, entitled BMW Vision Dynamics: the video on the big screens showed the BMW Vision Dynamics concept, the prototype of the all-electric self-driving sedan featuring level 3 autonomous driving functions. This vehicle is expected to be commercialised in 2021 as the first autonomous car produced by BMW.

In the proposed analysis, two concepts emerge that in my opinion help interpret the BMW live multimedia show in its aesthetic and performative construction, on the one hand, and in its communication and marketing strategy, on the other: movement and freedom. In the scene discussed above, movement is presented in the form of automation: the video shot by the "self-shooting" camera inside the self-driving car highlights the fact that the trigger and intentionality of the car movements did not derive from a driver but from the car itself. The automated movement of the self-driving car is the main feature used to represent and promote the novelty of self-driving technology. Movement in the show is featured not only as automated but also as coordinated, in particular when the cars' choreography displayed on the big central screen dovetails with the cars' choreography on stage, resulting in a "car dance." This choreography involves not only cars but also screens: the set of mobile screens used in the show can be seen, in my opinion, as a reference to the presence of multi-cameras in self-driving cars. As will be discussed later, the concept of movement as choreography can also be used to define the performativity of self-driving cars in the traffic environment.

The second keyword of the show is freedom: this idea is rendered by the voice-over accompanying the scene analysed. Alternating male and female voices declare the following statements (author's translation from the German): "I decide when I drive or when I am driven," "Music on, eyes shut down, mind off, and my auto takes my safely to my destination," "My music, my routes, my contacts. Always and everywhere," "Relaxed in the traffic, and more time for me and my family." These slogans announce the main selling points of self-driving cars: I can do other things while driving and I can let the car drive itself if I want to or if I am not feeling up to it. The passengers in self-driving cars can use their newly gained time while travelling for relaxing or working, watching movies, social networking or even sleeping. The way in which self-driving innovation is communicated and marketed in this scene calls into question the ideology of efficiency and self-optimisation, especially in the management of work and spare time: I refer here to the concept of "aesthetic of regulation" (Ästhetik *der Verfügen*) proposed by Jan Distelmeyer with regards to the marketing strategies of computer-based technologies.[4] The concept of movement is also evoked in the name chosen for the BMW self-driving prototype, namely Vision Dynamic. Moreover, the notions of freedom and movement appear together in the slogan "Embracing the freedom of movement" used to promote the BMW i3 on the American website of the company.[5]

The question arising at this point is: "What freedom do we need?," and I recall this question from the title of a book published by the Green party in Germany in 1989 on the psychology of the automobile society.[6] This question leads to the second part of this paper, in which, prompted by the analysis of and considerations related to the BMW multimedia show at the IAA, I first discuss the functioning of self-driving technologies according to different levels of automation and then consider the interrelation between self-driving technologies and audiovisual technologies.

Self-driving technologies and audiovisual technologies

Self-driving technologies are divided into five levels of progressive automation, according to a classification approved by the Society of Automotive Engineers (SAE)[7] and the National Highway Traffic Safety Administration (NHTSA). In level 0, there is no automation; the driver completely controls all driving actions and tasks: steering, brakes, throttle, and power. Level 1 "driver assistance" comprises cars with driver assistance systems, allowing them to perform automated operations, such as cruise control, accelerating and braking. Level 2 "partly automated driving" includes semi-autonomous driving assistance systems in which both steering and accelerating/decelerating can be performed simultaneously by the car: the driver can take his/her hands off the steering wheel and his/her foot off the pedal at the same time, while the car performs operations, such as cruise control and lane centering. Most of the cars on the market today are level 1 or 2, offering different forms of driver assistance systems.

Level 3 "highly automated driving" refers to properly speaking autonomous or self-driving cars that can take control completely under certain traffic and environmental conditions, for instance on motorways. The driver can leave control to the car and turn his/her attention away from driving, but he/she still needs to be present in the driving position in order to supervise the situation and be ready to take control back if the car signals a warning or request to intervene. The BMW research vehicles as well as the Audi A8 Luxury Sedan and Tesla Model S fall into this category. Level 4 "fully automated driving" encompasses fully autonomous cars that can handle the majority of driving situations independently, not only on motorways but also in complex urban traffic situations. Such cars can perform all driving tasks critical to safety and autonomously conduct an entire trip, but the presence of a driver is still required. The driver must remain fit and be able to take control if needed. Level 5 "full automation" includes properly speaking driverless cars that can drive completely independently and perform all driving tasks in every driving scenario without any control by humans: cruise control to adjust speed, automatic steering to keep straight, auto lane change, etc. For this level, no driver is needed to assume operations; the car might not have any position for a driver nor have a steering wheel, making everyone inside the car a passenger. Google, Nissan and Mercedes Benz are working in this direction, with the aim of introducing the first driverless cars in 2020-2021.

Referring to the above-mentioned question "What freedom do we need?" I propose to regard the SAE/NHTSA classification as a way of measuring the kind of interaction between human and machine, namely how control, agency and power are distributed between human and machine during driving. This classification traces, from level 0 to 5, the progressive increase in control and agency on the machine side and the corresponding forfeit of control and gain of freedom on the human side.

The operation of self-driving cars is controlled by advanced-driver assistance systems (ADAS), on-board computers that interpret the information on the external environment gathered by different devices, decide the course of action based on that interpretation, and according to that interpretation, control operations such as steering, braking and accelerating. These automated driving systems are based on computational intelligence and self-learning algorithms that enable and control self-driving functions. The functioning of self-driving technology is largely dependent on audiovisual technologies. In the scope of this paper, I focus on the modes of interrelation and integration of these two types of technology, namely car-autonomous and audiovisual technologies: here I propose to differentiate between three sets of audiovisual technologies installed in self-driving cars.

The first one concerns the audiovisual technologies used to analyse, understand and control the outside environment. These are composed of a set of cameras, radars and lidars. There can be up to a dozen cameras in an automated car (fig. 130): the cameras are distributed in the front, rear, sides and surrounding parts of the car in order to capture a 360 degree area around the vehicle. The cameras are the main devices that allow the vehicle to see the environment around it and interact with it. These cameras are implemented with image recognition technologies that, through the analysis of moving images, can recognise and detect different elements in the surroundings, such as bicycles, pedestrians, buildings and the like. In addition to cameras, radar and lidar also contribute to collecting information on the external environment. They both serve to measure the distance to a target: radars do so by sending out radio waves, while lidar[8] uses infrared light. Road recognition systems integrate the information coming from radars, lidars and cameras in order to analyse, control and navigate the external environment. If camera, radar and lidar are the eyes of the car perceiving the world, the brain that interprets the images and signals resides in the on-board computer system.

The second set of audiovisual technologies are in-car sensing technologies based on face recognition, realtime biometrics and computer vision (fig. 131). These technologies serve different security purposes, for instance, recognising if the driver becomes tired or inattentive. The sensor system is directed at the "assisted" driver and measures eye openness, gaze vector and blink frequency. The face recognition system interprets if the driver becomes tired or is falling asleep, and communicates that to the self-driving system, which can, if necessary, take control over the car.

The third type of audiovisual technologies is the one installed inside self-driving cars. This includes the tools that let human and car interact: monitors, vocal commands, computer controls, and devices displaying images from the cameras. The design developments and future arrangements of self-driving car interiors are still to be explored: big massive screens, retractable steering wheels, digital displays for mirrors, passenger areas with touchscreen displays. Screens will occupy an increasing space and prominent position inside the vehicles; they are placed along the dashboard, as in the SUV by the Chinese manufacturer Byton, or on the side doors, as in the Mercedes Benz F15 Luxury prototype, a fully autonomous car. In the latter model the car inside becomes a living and working space: the steering wheel retracts completely and the driver can abandon the driving position and turn the seat around as a rolling chair (fig. 132).

Sound is also a relevant factor in contemporary car design. Big efforts are being made in order to make car engines silent for both the people inside and outside the car,[9] reduce the noise coming from the external environment, design the sound that the car makes when it is started or when the doors close. As regards the interior sound design of self-driving cars, sound will play an interesting role under many aspects, for instance, how the car communicates with the driver through sound signals and automated voices or how the sounds coming from the different screens and video playback devices resonate in the car through amplification systems.

Self-driving cars: Auto-mobility between choreography and performativity

This brief overview of the uses of audiovisual-based technologies in self-driving cars raises the issue of the interaction between the driver and the car. In the final part of this paper, I reflect on the modes of interactions between humans, machines and environment in the complex media ecology system of future urban traffic. Self-driving cars are supposed to read traffic signals, signs and traffic lights, as well as to interact with other cars, pedestrians, bicycles and motorcycles. The way in which self-driving cars interact with the environment is regulated by the on-board computer, an artificial intelligence that collects all the information coming from the various cameras, radars, lidars and sensors, analyses them, makes judgments and takes decisions accordingly. In other words, the cameras and sensors are the eyes, while the software system is the brain that analyses and interprets the information, and then communicates decisions to the steering wheel, the accelerator and the brake.[10]

To understand how self-driving cars perceive the external environment thanks to audiovisual technologies, I refer to the Google autonomous operating system, as illustrated by Chris Urmson, head of the Google self-driving car team, during his 2015 TED presentation. Figure 133 presents a model of how the Google Waymo driverless car sees the world: the purple boxes are vehicles, the red ones are cyclists, and the lines are the trajectories that each vehicle is supposed to follow. The software analyses the information coming from the cameras and sensors to build a model of the external environment that is based on a geometric understanding of the world: each element – car, pedestrian or bicycle or motorcycle – is identified as a shape in movement in a 3D space. The car's artificial intelligence learns patterns of movement and how to respond to the ones performed by other actors, as in a dance choreography.

I argue that the concepts of choreography and performativity, which emerged in the analysis of the BMW multimedia show, are a clue to describing the functionality and relationality of self-driving cars. The functioning of machines is often described in terms of operativity, meaning how machines are capable of successfully completing certain operations according to a received set of instructions. On the other hand, performance and performativity are usually related to human actors and the interrelations between them. In order to define the complex set of interrelations between humans and machines that take place in traffic contexts, it seems worthwhile to consider the concept of performativity instead of operativity with regard to self-driving cars and their forms of autonomous agency. I refer here to a broader concept of performativity that includes technological actors as well as human actors, something French philosopher Bernard Stiegler defines as a "generalised performativity" of "technics,"[11] elaborating on the concept of "natural" and "technical *milieux*" by philosopher Gilbert Simondon.[12]

With their decisions and actions, self-driving cars interact in a complex network of relations between human and technological actors: this refers not only to the interaction between the self-driving car and the driver but also the relations between the autonomous machine and other vehicles or road's actors. Streets can be considered as performative spaces where interactions between humans and machines take place based on the different actors' perceptions, decisions and actions. These interactions are also influenced by the type of context in which they occur, i.e. highways, city streets or rural roads.[13]

Following this line of reasoning, it is important to stress that driving is indeed a form of performance, namely a social performative practice that is geographically and culturally determined. Beyond national road traffic laws, there are various sets of unwritten codes and rules that pertain to each country or even each region. It is a common experience that driving in another country or even in another region can be extremely challenging; it often requires an adjustment to a new set of rules and behaviours. In view of this, one can ask to what extent the reduction of the traffic system to a geometrical map performed by self-driving technologies can be problematic: How can a car's artificial intelligence learn to deal with a set of unwritten rules and cultural codes? How can this artificial intelligence learn from the particular pattern of choreographies taking place in a particular regional set? Last but not least, driving is a performance practice in which people express certain traits of their personalities. How can self-driving cars interact with different human driving characters? These questions remain open for further research and inquiry.

Unfolding in a choreography of cars, screens and human actors, the BMW multimedia show suggested future forms of interaction between humans and machines in traffic environments and urban ecologies. Streets are the social stages in which driving performances of humans and autonomous cars are interlaced in multiple choreographies. The mappings and cartographies of these choreographies, recorded by audiovisual means, contribute to creating a collective artificial intelligence for autonomous cars. The integration of audiovisual and self-driving technologies has an important implication also with regard to audiovisual collective memory: every self-driving car circulating will have a set of cameras filming – always and everywhere. These videos, pertaining to the domain of operative images,[14] could become the uninterrupted recordings of the life of entire cities and villages. The afterlife of the images recorded by self-driving cars raises many questions: In which forms and modalities will these videos be saved, stored and/or archived? Who would have access to them? What legal and surveillance issues are at stake? These questions are beyond the scope of the paper but still suggest to what extent reflecting upon the future of car technologies means inevitably thinking about the future of cinema and audiovisual media and vice-versa.

Illustrations

127. The BMW Multimedia live show at the International Automobile Exhibition, Frankfurt 2017.
128. The BMW Multimedia live show at the International Automobile Exhibition, Frankfurt 2017.
129. The BMW Multimedia live show at the International Automobile Exhibition, Frankfurt 2017.
130. Road recognition System: on board cameras.
131. In-car sensing technologies: computer vision and face recognition based security systems (Jabil Inc and eyeSight Technologies System, https://globenewswire.com/news-release/2017/08/10/1228665/0/en/Jabil-and-eyeSight-Technologies-Partner-to-Develop-Next-Generation-In-Car-Sensing-Technology.html).
132. In-car audio-visual technologies: Mercedes-Benz F 015.
133. Choreographies on the road: Presentation "How a driverless car sees the world" by Chris Urmson, Head of Driverless Car Program at Google, TED Talk 2015.

Notes

[1] See among others Marshall McLuhan, *Understanding Media: The Extensions of Man*, McGraw Hill, New York 1964; Anne Friedberg, *The Virtual Window. From Alberti to Microsoft*, MIT Press, Cambridge (MA) 2006; Karen Beckman, *Crash: Cinema and the Politics of Speed and Stasis*, Duke University Press, Durham 2010.

[2] https://archiv2017.iaa.de/en/iaa/statistics-iaa-2017/, last visit July 2018.

[3] https://www.youtube.com/watch?v=F08zA8xC3aA, scene analysed from minute 3'30" to 6'10", last visit July 2018.

[4] Jan Distelmeyer, *Machtzeichen. Anordnungen des Computers*, Bertz + Fischer, Berlin 2017, p. 72.

[5] https://www.bmwusa.com/vehicles/bmwi/bmw-i3.html, last visit July 2018.

[6] Die Grünen im Bundestag, *Welche Freiheit brauchen wir? Zur Psychologie der Auto-Mobilen Gesellschaft*, Verl. für Ausbildung u. Studium, VAS in Elefanten-Press, Berlin 1989.

[7] https://web.archive.org/web/20161120142825/http://www.sae.org/misc/pdfs/automated_driving.pdf, last visit July 2018.

[8] Lidar is an abbreviation for *light imaging, detection, and ranging*: it measures distance by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor. The results are compiled in a point cloud, which works like a 3-D map of the world in real time.

[9] See the Volkswagen commercial titled *Enjoy the silence*: https://www.youtube.com/watch?v=vY5jNv391rk, last visit July 2018.

[10] For a description and analysis of the learning and decision-making process involved in self-driving cars see: Adrian Mackenzie, *Machine Learners. Archaeology of a Data Practice*, MIT Press, Cambridge (MA)-London 2018; Florian Sprenger, "Intervals of Intervention: Micro-decisions and the Temporal Autonomy of Cars," in Kyle Stine, Axel Volmar (eds.), *Hardwired Temporalities*, Duke University Press, Durham (NC) forthcoming.

[11] Bernard Stiegler, *Technics and Time: 1. The Fault of Epimetheus*, Stanford University Press, Stanford 1998, p. 80.

[12] Gilbert Simondon, *Du mode d'existence des objects techniques*, Aubier, Paris 1958, p. 55.

[13] For a further discussion of social interaction on the road see Barry Brown and Eric Laurier, "The Trouble with Autopilots: Assisted and Autonomous Driving on the Social Road," in Gloria Mark, Susan Fussell (eds.), *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, ACM, New York 2017, pp. 416-429.

[14] The concept of operative images (*Operative Bilder*) was elaborated by filmmaker and theorist Harun Farocki to define "images that do not represent an object, but rather are part of an operation." Harun Farocki, "Phantom Images," in *PUBLIC*, no. 29, 2004, p. 17, based on a talk delivered at ZKM Karlsruhe, trans. Brian Poole. This concept is also elaborated in Farocki works *Eye/Machine* (2001) and *Eye/Machine III* (2004).

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La Ville comme espace d'exposition : notes sur le cinéma exposé et l'architecture

Le rapport entre cinéma et architecture fait partie d'un domaine qui continue à être particulièrement fécond et qui permet différents types d'analyse, allant de l'observation d'une ville à travers le cinéma à la façon dont une certaine architecture a été influencée par les images en mouvement, et à la manière dont l'espace urbain a trouvé des solutions toujours nouvelles pour les accueillir.
Cet article entend développer un parcours à travers certaines formes artistiques qui se trouvent à la frontière entre la culture cinématographique, l'art contemporain et l'architecture. Dans ce contexte précis, il ne s'agit pas d'observer comment la ville est analysée, montrée, recréée à travers le cinéma ou l'art, ce qui a été largement fait par plusieurs chercheurs, mais plutôt de se pencher sur les réseaux de relations qui se créent lorsqu'une forme particulière de cinéma et d'art contemporain, le cinéma exposé, s'insère dans l'espace urbain et s'applique à lui. Après avoir développé certaines réflexions sur les concepts-clé concernant ce thème, c'est-à-dire l'écran, la projection et la perception de l'espace de la ville à travers l'art, cet essai se concentrera principalement sur l'observation de « l'espace périfilmique » dans le contexte urbain et sur la structure particulière du musée considérée comme une surface de projection.

Les écrans dans l'espace de la ville

À notre époque, nous sommes en train d'assister au phénomène de plus en plus important de la prolifération des écrans. Leur capacité à s'insérer dans nos habitudes et dans toutes sortes d'espaces nous met dans la condition de devoir repenser certains paradigmes d'analyse. Comme le propose Richard Koeck :

> *Considérant que nous sommes « face à l'écran » aujourd'hui – et donc que nous sommes face à des images animées – non seulement à travers une structure narrative offerte par les films conventionnels, mais aussi à travers les images en mouvement comme éléments structurels intégrés aux expériences urbaines – il semble que ce soit le bon moment pour réexaminer le rôle des écrans dans le contexte d'une culture visuelle urbaine.*[1]

Les écrans auxquels fait référence l'analyse de Richard Koeck comprennent une variété bien plus vaste de cas liés à l'art contemporain et au cinéma exposé[2] que nous verrons dans ce texte, et sa réflexion met particulièrement l'accent sur l'évolution technologique, même si nous pouvons d'ores et déjà saisir ce qui l'incite à observer le concept d'écran et la « culture visuelle urbaine ». Le concept d'écran fait l'objet de plusieurs études qui ont servi à délimiter sa généalogie et même à identifier un champ de recherche compris à l'intérieur des *media studies* et lié au développement de l'archéologie des médias, la « screenology »,[3] ayant pour but de comprendre le « rôle culturel » des écrans, considérés comme des « surfaces d'information ». Le vaste concept de

culture visuelle[4] s'insère dans le cadre de référence qui sera fondamental aux visées de cet article, c'est-à-dire l'espace urbain dans le contexte de ses transformations sociales, architecturales et, surtout, technologiques.
Afin de pouvoir observer pleinement cette configuration culturelle, il est nécessaire de considérer les écrans et, plus globalement, les surfaces de projection comme entités qui *déterminent* un environnement, puisque l'écran est « en quelque sorte double : d'une part, il est une surface qui accueille une série d'images destinées à l'œil d'un observateur : d'une autre, il est un objet occupant un certain espace et qui, donc, en vertu de sa présence, contribue à le façonner »,[5] une entité qui devient l'un des éléments du *mediascape.*[6]
Les réflexions qui seront développées dans cet article sont liées en particulier au rapport entre l'espace urbain et le cinéma exposé. Ce dernier fait l'objet, depuis déjà plusieurs années, de réflexions critiques complexes qui ont été stimulées par la nécessité de comprendre la pénétration des images en mouvement dans des contextes différents de ceux de la salle de cinéma, dans un panorama contemporain qui voit des frontières de plus en plus ténues entre les arts – frontières qui parfois disparaissent entièrement. L'horizon complexe englobé par le cinéma exposé a vu le jour grâce à certaines conditions, parmi lesquelles, comme l'écrit Francesco Casetti, « the advent of digital technologies, which transformed the character of image and sound » et « the processes of convergence, which led different media to integrate », qui ont permis au cinéma de cesser d'être « only a strip of film to be passed through a projector aimed at a screen inside a public space »[7] : une série de pratiques, à la frontière entre cinéma et art contemporain, sans lien avec les distinctions classiques des supports comme par exemple la pellicule ou la vidéo, mais plutôt avec le vaste ensemble des images en mouvement de provenance ou d'inspiration filmique. Un complexe que nous pouvons appeler « formes cinématographico-artistiques contemporaines ».[8]
Le même rapport qui sous-tend le cinéma et l'architecture a été affronté selon divers aspects[9] mais, il faut le préciser, moins fréquemment dans les interférences qui existent entre le cinéma exposé et l'espace urbain, c'est-à-dire dans l'observation de la manière dont les images en mouvement remodèlent l'espace de la ville. Il s'agit d'un rapport qui dans les décennies a été capable de créer des réflexions profondes sur le cinéma et sur l'architecture, en les considérant aussi comme des catégories esthétiques. Giuliana Bruno, qui dans son livre *Surface* poursuit sa réflexion sur le rapport entre les différents arts et le cinéma, réflexion déjà amorcée dans *The Atlas of Emotions* et *Public Intimacy*, peut être l'un des guides qui nous accompagnera dans cette analyse. C'est à ce propos dans *Surface* qu'elle écrit :

> *Cinema, like modern architecture, is an expression of plastic luminosity, an art of projection of multiple, mutable planes. It joins architecture as a space that is built and transformed by light, which is itself a form of architecture. Film and architecture are both sites of dwelling that are not only fundamentally perceived by way of light but also absorbed, and altered, as one moves through spaces of light.*[10]

La projection lumineuse est en effet l'un des principaux éléments de ce rapport : l'espace architectural est modelé par la lumière et, à son tour, il remodèle ses valeurs lumineuses grâce aux volumes construits. De la même façon, la projection est entièrement faite de lumière, comme cela est bien mis en évidence, dans l'art, par les *cônes de lumière* de certaines installations d'Anthony McCall, mais aussi, d'un point de vue muséographique, par la médiation difficile des espaces d'exposition qui accueillent les images en mouvement, lesquels sont toujours tiraillés entre le modèle du *white cube* de la galerie et celui de la *black box* de la salle de cinéma. La double influence du cinéma et de l'architecture est à son tour intégrée par le musée et par les significations multiples que son espace peut accueillir, un parcours qui trouve sa synthèse autour de la figure du spectateur, comme l'avait compris Eisenstein dans certaines de ses réflexions sur le montage,[11] et comme l'écrit Giuliana Bruno pour laquelle « the filmic path is the modern version of the architectural itinerary, with its own montage of cultural space ».[12]

Art et architecture : interférences sémantiques

Le contexte du cinéma exposé requiert un élargissement de notre champ de référence vers le champ vaste et complexe de l'art contemporain, dans son acception large d'« art élargi », comme l'a théorisé Mario Perniola,[13] car les formes cinématographico-artistiques contemporaines font partie du cinéma et de ses systèmes autant que l'art. Son insertion dans le contexte de l'espace urbain, son passage de la configuration de la salle de musée à l'environnement plus étendu de la ville, entre dans le contexte de ce phénomène grâce auquel, peut-être plus dans la ville contemporaine qu'à des époques précédentes, l'art se mélange à la construction spatiale, dans des formes et des modes très variés.

> *A widespread phenomenon is taking place in contemporary art as the mediatic configurations of art and architecture come closer together, converging in surface tension as they partake of common material ground. Art is melting into spatial construction, and as a consequence, architecture has become one of the most influential forms of imaging.*[14]

L'architecture, avec l'art, s'intègre dans ce parcours de création de l'« imaginaire urbain» : « l'ensemble des représentations, images et idées à travers lesquelles une société urbaine – ou une partie d'elle-même, ou ses idéologues ou ses artistes, qui sont bien souvent les mêmes – construit pour elle-même et pour les autres un auto-personnage, un auto-portrait ».[15] Ces mots de Jacques Le Goff peuvent suggérer un parcours d'analyse qui, en s'ouvrant à la contemporanéité, montre comme l'art *interfère*, *agit* et enfin *modèle* l'espace urbain. En construisant des parcours spectatoriels, l'art montre l'espace urbain renouvelé.
À ce propos, je cite à nouveau la réflexion de Giuliana Bruno :

> *The visual arts are intertwined with a particular « architecture » : with its material foundation, that is to say, with our sense of space, urban identity, and experience. They have become sites for the building of our subjectivity and the dwelling of our imagination. We may call this phenomenon a display of the « architectural imaginary », an alluring concept yet one whose definition is not at all obvious or easy to pin down.*[16]

Imaginaire urbain et imaginaire architectural se fondent en diverses formes dans le contexte plus vaste de la « ville médiatique », c'est-à-dire un espace urbain qui « s'entoure d'images, d'écriteaux et d'enseignes […] une ville-emballage où les dispositifs immatériels de l'électronique et du numérique prennent la relève de l'architecture traditionnelle, au sens d'une composition de formes et de volumes ».[17] Il est certain qu'en élargissant la définition de medium,[18] chaque époque a eu d'une façon ou d'une autre sa « ville médiatique », sans être pour autant constellée de « led, de pixels et de video wall»,[19] mais la ville contemporaine dans ses formes extrêmes, qui chronologiquement vont de la révolution industrielle au néolibéralisme, montre une prolifération exceptionnelle de dispositifs d'exposition des images toujours plus raffinés et complexes, concernant sans distinction les édifices commerciaux, culturels, sociaux, publics et privés. C'est en cela que les surfaces urbaines sont le centre du spectacle et que celles des « édifices contemporains représentent le point de convergence entre la façade libérée de la modernité et l'esthétique projetée de la contemporanéité ».[20] Il en résulte entre autres « a process that makes urban space visible and perceivable. The city's image is thus creatively generated in the arts, and the city itself is compelled, in the end, to closely interact with these visual representations, becoming to some extent the product of an artistic panorama ».[21] Les surfaces urbaines offrent littéralement un espace pour l'art, mais celui-ci modifie la perception architecturale et se croise avec elle au point d'en changer la perception. Il est bien entendu nécessaire de distinguer les images publicitaires, qui sont des travaux liés à la communication, des installations artistiques : on ne peut pas tout considérer comme du cinéma exposé, mais il est important d'observer ce phénomène comme faisant partie d'un système plus vaste qui en redistribue ses significations.

La question du « périfilmique » dans le contexte de l'espace urbain

Je voudrais revenir ici sur le concept de « périfilmique », au sens d'une articulation spatiale attribuable au contexte de l'art contemporain et de ses lieux d'exposition lorsqu'il accueille des images en mouvement installées. En littérature, le terme « périfilmique » a été seulement utilisé par François Jost (« périfilm »), lequel se limite toutefois à considérer en tant que tel la complexité spectaculaire de la salle qui se trouvait autour des projections du cinéma des origines : l'accompagnement musical, le bonimenteur, et bien d'autres choses encore…[22] Le terme utilisé ici entend en revanche une articulation spatiale conférée à l'espace physique et institutionnelle de l'art contemporain, mais aussi aux lieux dans lesquels ce même art produit de telles interférences qu'elles entrent dans la définition du lieu. Le périfilmique est donc l'environnement que le spectateur doit traverser et explorer autant que le filmique, avec cette grande différence que l'expérience en question est immédiatement physique. Les images, projetées, diffusées sur des écrans, enchâssées dans des objets, vivent dans deux espaces : celui qu'elles produisent elles-mêmes et celui de leur espace-vie. Le périfilmique, c'est donc l'espace du flâneur.

De la sorte, si avec le néologisme périfilmique on définit l'espace qui se trouve autour des images projetées, une bonne partie de l'espace urbain pourrait être considéré en tant que tel. Naturellement, quelques distinctions s'imposent : nous ne pouvons pas entendre avec ce terme tout l'espace urbain, mais nous pouvons utiliser cette catégorie pour comprendre quel est l'espace d'action du spectateur. Le déplacement de l'espace périfilmique du musée à l'espace de la ville est encore plus intéressant si l'on considère le potentiel que l'architecture offre aux artistes qui veulent œuvrer en ce sens. Si nous prenons en exemple la Screen City Biennal qui s'est déroulée en octobre 2017 à Stavanger, en Norvège, nous pouvons voir comment certaines actions artistiques ont été mises en œuvre pour que la ville, ou au moins quelques espaces urbains, deviennent un exemple d'exposition des images en mouvement à ciel ouvert. Ce sont des modèles qui proviennent de certaines formes d'arts visuels et qui recourent à l'utilisation d'images monumentales, d'écrans gigantesques et de surfaces de projection architecturales, selon des formes qui se rapprochent des films projetés en été sur les places ou dans les parcs : nous pouvons effectivement remarquer une grande connivence entre les diverses formes de cinéma en plein air et l'éventuelle transformation de ces dispositifs en supports pour les arts visuels.

Plus généralement, dans le contexte de l'espace urbain contemporain, il existe de la part du spectateur une manière de s'habituer au message visuel porté par les écrans, par les panneaux, par tout ce qui peut être entendu comme une surface de visionnage, et en outre « l'expérience de l'observateur-flâneur dans l'environnement des villes est engendrée par la convergence des nouveaux espaces urbains, des technologies, des fonctions économiques et des images ».[23]

Comme l'avait déjà supposé Nanna Verhoeff :

> *The* dispositif *of urban screens is spatially layered : at once comprising site-specificity of the screen – the inner-circle, if you will – as well as the surrounding public spaces – the outer circle. This broaches the question of how screens in the city situate us both as spectators in relation to the screen, and as navigators within and inhabitants of this larger, connected space. Moreover, it raises the question of how the presence of screens reconfigures the space itself. This entails a special attention to infrastructure – the spatial, urban* dispositif*; interface – the screen-spectator interaction ; and intervention – the way in which screens, spectators, and spaces mutually transform each other. Because of this double-sidedness and the interactivity it entails, the city-with-screens warrants an approach to the screens as an architectural interface.*[24]

Il en résulte un dispositif complexe, quelque chose qui n'est pas encore complètement définissable, puisque l'écran lui-même est un *concept in progress* se trouvant aujourd'hui au centre d'un débat philosophique, cinématographique et artistique, ce qui en fait l'objet de nombreuses sollicitations. La ville est sur une surface de projection, mais pas dans son entièreté, car toutes ses architectures ne peuvent être considérées comme telle. Malgré cela, l'espace urbain est devenu l'un des modèles pour comprendre l'espace cinématographique non seulement dans sa représentation à l'intérieur des images, mais aussi pour voir comment les images sont représentées et projetées en son sein. Même si ce que l'on a appelé la *Media City* a été largement étudié et commenté, il ne s'agit pas ici d'observer comment les projections entrent dans ce contexte mais plutôt de distinguer tout ce qui est message de diverses provenances (publicitaire, commerciale, informative), de ce qui est une œuvre cinématographique authentique ou une œuvre artistique liée à un contexte différent.

En observant le cheminement créatif que certains artistes, comme par exemple Doug Aitken, ont parcouru, nous voyons bien comment les catégories d'art public, d'art urbain, de cinéma exposé, d'environnement vidéo et d'installations vidéo se croisent de plus en plus.

Et ce n'est pas tout, car comme l'a bien remarqué Térésa Faucon, ce genre d'expérience provoque des pratiques de montage visuel encore plus complexes que celles observées à l'intérieur de l'espace muséal :

> *Ce mouvement de réponse et d'interprétation du spectateur devant les écrans, architecturant l'espace ou s'insérant dans une architecture devenue écran, prolonge la promenade Benjaminienne comme modèle de montage impliquant le déplacement du point de vue dans l'espace et le temps et rend évident « l'effet 'cadre' » du montage architectural théorisé par Eisenstein, « c'est-à-dire la confrontation successive des cadres [délimités par l'agencement des éléments architecturaux, 'cadrant' la vision] dans le parcours ».*[25]

Les surfaces se mélangent ainsi aux espaces, les formes de visionnage sortent de la salle de musée, entrent dans l'espace urbain et se déplacent selon les temps des spectateurs.

Frontières

Il est particulièrement intéressant de se pencher sur les cas d'œuvres insérées dans des contextes plus vastes que celui de la simple projection d'un *mapping* architectural. À Gorizia, en 2015, à l'occasion de la première édition du festival Invisible Cities, un projet lié à différents aspects de l'art public et à l'utilisation et à la réutilisation des espaces urbains, les spectateurs ont eu la possibilité d'assister à une projection de *mapping* sur l'ancienne gare Transalpine, à la frontière entre l'Italie et la Slovénie, sur le thème de la Grande Guerre dont on célébrait le centenaire, *A Heap of Broken Images* (2015), un projet réalisé par Karmachina. Dans le contexte de l'Urban Media Festival, tel que se définissait Invisible Cities, cette œuvre possède des connotations complexes qui rejoignent l'histoire de la ville et du territoire, et offrent plus généralement un travail scénarisé et mis en musique, aux tonalités spectaculaires (figg. 134-135).

À la lumière de cet évènement, il devient encore plus fondamental de réfléchir sur les connexions des catégories de dispositif, de medium et de *site*, car dans celles-ci nous trouvons le réseau de relations qui entourent le spectateur et donc qui le délimitent à l'intérieur de l'espace périfilmique. Ce sont des paysages médiatiques, des modèles de construction du filmique qui vont ressurgir dans des constructions architecturales urbaines, où le tissu de la ville se croise ainsi avec la construction de l'être artistique. Ces espaces deviennent des parcours muséographiques de la même façon que les structures scénographiques des musées créées à l'intérieur de l'architecture. Dans le cas du festival Screen City et Invisible Cities la ville est imprégnée d'un « effet cinéma »,[26] qui se propage dans tout le tissu urbain. De grandes expositions comme Documenta ou bien comme certaines biennales suivent depuis quelques années cette même optique.

Une configuration artistique particulièrement intéressante, et qui agit aussi dans ce sens, est celle qui voit la surface du musée devenir une frontière physique, matérielle et conceptuelle afin de montrer les images en mouvement. Une sorte de *composante architecturale*, un ensemble composite de niveaux qui créent une stratification spatiale perceptible par le spectateur. Concrètement, l'édifice muséal agit en tant que séparateur, en partant du constat que la première fonction de la salle de cinéma et de la salle de musée est d'isoler.

Un ensemble de boîtes qui, à son tour, contient d'autres divisions internes, mais qui est surtout décliné dans les diverses formes d'exposition contemporaines : pavillon, musée, gallerie, promenade, parcours, tout en étant influencé par la dichotomie citée plus haut entre *white cube* et *black box*. En réalité, le dispositif muséal est enveloppé par un *hyper-dispositif* urbain.

Ce type de configuration a été bien exploité par certains artistes comme Doug Aitken, Pipilotti Rist, mais aussi Rosa Barba, par exemple dans l'opération qu'elle accomplit dans *White Museum* (2010), où dans diverses occasions (au Centre international d'art et du paysage de l'Île de Vassivière, au Jeu de Paume de Paris, au WIELS Contemporary Art Center de Bruxelles, entre autres) elle utilise un projecteur et une pellicule 70mm blanche pour projeter depuis l'intérieur du musée vers l'extérieur un faisceau de lumière de la même couleur. L'espace du musée est en effet la première frontière que nous pouvons considérer lorsque nous voulons étudier les images en mouvement d'origine cinématographico-artistique dans le contexte de la ville. Un autre exemple intéressant et celui du Museion de Bolzano, musée à l'architecture insolite qui s'est transformé lors de plusieurs occasions en écran pour montrer une programmation d'art vidéo. L'enveloppe architecturale du musée est devenue avec le temps l'un des symboles de la ville, et pas uniquement pour la culture. Elle s'est insérée dans le tissu urbain et est devenue à quelques occasions un authentique cinéma en plein air.

Au cours de cette brève liste d'exemples, il faut encore évoquer des projets commerciaux comme celui de NEO – Narrative Environments Operas – intitulé *La Mer à Milan* et réalisé à l'occasion de la Triennale de 2017 en dehors de l'exposition (figg. 136-137). Dans ce cas, le groupe milanais spécialisé dans les environnements sensibles a eu le souci d'apporter virtuellement la mer à Milan à travers une projection réalisée devant l'entrée de la Triennale. Projet d'une certaine complexité due au fait que l'espace extérieur est relié à un espace intérieur dans lequel le parcours de projections se poursuit.

Ruggero Eugeni remarque comment « media and artistic interventions in urban spaces should be considered and analysed as practices of appropriation of territories and of establishment of new forms of power »[27] et les formes de cinéma exposé présentées ici agissent dans ce sens, en tant que pratiques de reterritorialisation médiatique et, parfois, sociale. À une époque où l'urbanisation de plus en plus forte rend nécessaire un renouvellement des réflexions culturelles, sociales et artistiques liées à la ville et à notre façon de percevoir l'habité, l'observation de diverses utilisations des images en mouvement dans les contextes urbains devient centrale pour comprendre les transformations perceptives en acte. L'espace extérieur du musée, sa forme architecturale, ses utilisations ainsi que ses manifestations artistiques comme les biennales et les grandes expositions d'art sont au centre de ces pratiques, et elles font dialoguer la catégorie de *surface* avec celle de *Screen City*.

Illustrations

134. Karmachina, *A Heap of a Broken Images*, 2015 (avec l'aimable autorisation des artistes).
135. Karmachina, *A Heap of a Broken Images*, 2015 (avec l'aimable autorisation des artistes).
136. NEO, *Il mare a Milano*, 2017 (avec l'aimable autorisation des artistes).
137. NEO, *Il mare a Milano*, 2017 (avec l'aimable autorisation des artistes).

Notes

[1] Richard Koeck, *Face à l'écran et au-delà. Spectateurs urbains et interactions spatiales*, dans Mauro Carbone, Anna Caterina Dalmasso, Jacopo Bodini (sous la direction de), *Vivre par(mi) les écrans*, Presses du réel, Paris 2016, p. 200.

[2] Richard Koeck dirige le Center for Architecture and the Visual Arts de la School of Architecture (University of Liverpool, qui ne s'intéresse pas seulement à l'image filmique, mais aussi à l'espace numérique et interconnecté. Cf. http://www.cava-research.org, dernier accès 31 décembre 2018).

[3] Erkki Huhtamo, « Elements of Screenology : Toward an Archaeology of the Screen », dans *ICONICS. International Studies of the Modern Image*, vol. 7, 2004, pp. 31-82. Cfr. Mauro Carbone, *Philosophie-écrans. Du cinéma à la révolution numérique*, Vrin, Paris 2016 ; Dario Cecchi, « The Elusive Body: Abstract for a History of Screens », dans *Rivista di estetica*, n° 55, 2014, pp. 35-51, à l'intérieur du numéro dédié aux écrans, sous la direction de Mauro Carbone et d'Anna Caterina Dalmasso ; Gilles Lipovetsky, Jean Serroy, *L'Écran global : culture-médias et cinéma à l'âge hypermoderne*, Éditions Le Seuil, Paris 2007 et le paragraphe

« Schermi: genealogie, tipologie, sperimentazioni » dans Andrea Pinotti, Antonio Somaini, *Cultura visuale*. *Immagini sguardi media dispositivi*, Einaudi, Torino 2016.

[4] Parmi la littérature foisonnante sur ce thème, il faut consulter W. T. J. Mitchell, *Que veulent les images. Une critique de la culture visuelle* (*What do Pictures Want ? : The Lives and Loves of Images*, University of Chicago Press, Chicago 2005), Presses du réel, Paris 2014 et le volume précédemment cité *Cultura visuale* d'Andrea Pinotti et Antonio Somaini.

[5] Francesco Casetti, *Postface. Écrans, images, milieux. Une visite à la Fondation Vuitton*, dans Mauro Carbone, Anna Caterina Dalmasso, Jacopo Bodini (sous la direction de), *Vivre par(mi) les écrans*, cit., p. 288, et faisant aussi référence à Giuliana Bruno, *Surface : Matter of Aesthetics, Materiality, and Media*, University of Chicago Press, Chicago 2014.

[6] Francesco Casetti, *Postface. Écrans, images, milieux. Une visite à la Fondation Vuitton*, cit., p. 290.

[7] Francesco Casetti, *The Lumière galaxy. Seven key words for the cinema to come*, Columbia University Press, New York 2015, p. 2.

[8] Je reprends ici la définition que j'ai proposée dans une série d'articles et dernièrement dans le livre *Cinema esposto*. *Arte contemporanea, museo, immagini in movimento*, Forum, Udine 2017, où j'ai résumé et analysé cette longue querelle analytique et critique dans le chapitre « Una cartografia teorico-critica del cinema esposto », pp. 25-58.

[9] Il existe sur ce thème une littérature vaste et variée, parmi laquelle : Paolo Cherchi Usai, Frank Kessler (sous la direction de), *Cinéma et architecture*, dans *Iris*, n° 12, 1991 ; Marco Bertozzi, *L'occhio e la pietra. Il cinema, una cultura urbana*, Lindau, Torino 2003 ; Id. (sous la direction de), *Il cinema, l'architettura, la città*, Editrice Librerie Dedalo, Roma 2001 ; Clotilde Simond, Sophie Paviol, *Cinéma et architecture. La Relève de l'art*, Aléas, Lyon 2009 ; Elena Biserna, Precious Brown (sous la direction de), *Cinema, Architecture, Dispositif*, Campanotto, Udine 2011 ; Synne Bull, Marit Paasche, *Urban Images. Unruly Desires in Film and Architecture*, Sternberg Press, Berlin 2011 ; Richard Koeck, Les Roberts, *The City and the Moving Image. Urban Projections*, Palgrave Macmillan, London 2010 ; Richard Koeck, *Cine-scapes. Cinematic spaces in architecture and cities*, Routledge, New York 2013 ; Miriam De Rosa, *Cinema e postmedia. I territori del filmico nel contemporaneo*, Postmedia Books, Milano 2013 ; Nasrine Seraji, Jessie Magana (sous la direction de), *Architecture & cinéma*, École nationale supérieure d'architecture Paris-Malaquais, Gollion, Infolio Éditions, Paris 2015 ; Antonio Somaini, *La «Glass house» de Sergueï Eisenstein: Cinématisme et Architecture de verre*, Éditions B2, Paris 2017.

[10] Giuliana Bruno, *Surface*, cit., p. 55.

[11] Dans les deux textes *Montage et architecture* et *El Greco y el cine*, dans François Albera (sous la direction de), *Cinématisme : Peinture et cinéma*, Les Presses du réel/Kargo, Dijon-Paris 2009.

[12] Giuliana Bruno, *Public Intimacy : Architecture and the Visual Arts*, The MIT Press, Cambridge (MA)-London 2007, p. 19.

[13] Mario Perniola, *L'arte espansa*, Einaudi, Torino 2015.

[14] Giuliana Bruno, *Surface*, cit., p. 187.

[15] Jacques Le Goff, *L'immaginario urbano nell'Italia medievale (secoli v-xv)*, dans Cesare de Seta (sous la direction de), *Storia d'Italia. Annali, 5. Il paesaggio*, Einaudi, Torino 1982, p. 7. L'essai de Le Goff est à la base de nombreuses recherches sur l'histoire de la ville et le rapport entre cinéma et architecture.

[16] Giuliana Bruno, *Surface*, cit., pp. 187-188.

[17] Lucio Altarelli, *La città plurale. Architetture e Paesaggi della Post-modernità*, postmediabook, Milano 2015, p. 180.

[18] Cf. Andrea Pinotti, Antonio Somaini, *Cultura visuale*, cit.

[19] Lucio Altarelli, *La città plurale*, cit., p. 180.

[20] *Ibidem.*

[21] Giuliana Bruno, *Surface*, cit., p. 188.

[22] François Jost, *Le Cinéma dans ses œuvres*, dans Jacques Serrano, Jacinto Legeira (sous la direction de), *Après Deleuze : Philosophie et esthéthique du cinéma*, Éditions Dis Voir, Paris 1996, p. 124.

[23] Olga Venetsianou, Giorgos Papakonstantinou, *Cinéma architectural : la diffusion de l'espace de projection dans le tissu urbain*, dans Irène Bessière, Laurent Creton, Kira Kitsopanidou, Roger Odin (sous la direction de), *Ville et cinéma. Espaces de projection, espaces urbains*, *Théorème*, n° 26, 2016, p. 169.

[24] Nanna Verhoeff, *Screens in the City*, dans Dominique Chateau, José Moure (sous la direction

de), *Screens. From Materiality to Spectatorship. A Historical and Theoretical Reassessment*, Amsterdam University Press, Amsterdam 2016, p. 125.

[25] Térésa Faucon, *Ville-images. Forme inédite de montage*, dans *Ville et cinéma. Espaces de projection, espaces urbains*, *Théorème*, cit., p. 186.

[26] Philippe Dubois, « Un 'effet cinéma' dans l'art contemporain », dans *Cinéma&Cie. International Film Studies Journal*, n° 8, 2006.

[27] Ruggero Eugeni, *Nikeplatz, The Urban Space as a New Medium*, dans Elena Biserna, Precious Brown (sous la direction de), *Cinema Architecture, Dispositif*, cit., p. 57.

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Creating Entangled Histories of Museum Collections: Isaac Julien's *Vagabondia* (2002) and Camille Henrot's *Grosse Fatigue* (2013)

What do moving images do to museums? In Isaac Julien's *Vagabondia* (2002) and Camille Henrot's *Grosse Fatigue* (2013) moving images are arranged to create a *mise-en-abyme* effect. For Julien, a mirror reflects the image of collector, John Soanes, within numerous frames; for Henrot, desktop cinema techniques allow her to open infinite windows, creating an ever-retreating, increasingly miniaturised central image based on the collection of the Smithsonian Institute. This shared effect points to the attitude each artist takes to the museums they study, and to the relationship between the museum collection and its depiction via the moving image. On the one hand we have Sir John Soanes' house museum in London, home to an eccentric collection of artefacts, paintings and sculptures, on the other, the Smithsonian Institute in DC, the biggest scientific and museum complex in the world. As the *mise-en-abyme* suggests, both artists are interested in associating these museum collections with other stories-within-stories and information-within-information: in other words, they are interested in creating "entangled histories." We borrow Rey Chow's application of entanglement, for her it describes the "intimation of a tangle, of things held together or laid over one another in nearness and likeness" at the same time, she adds, entanglements can be "conceivable through partition and partiality rather than conjunction and intersection, and through disparity rather than equivalence."[1]

In this paper we will use *Vagabondia* and *Grosse Fatigue* as two contrasting case studies that explore the creation of entangled histories. The entanglements interesting us the most are those between moving images and museums, which develop in terms of representation and fictionalization, as well as of relationships between media – video installations and desktop cinema. While both Julien and Henrot are united in the way they open museums out as spaces for association, they create diverse positions and dispositions across the media involved. Specifically, we argue that while Julien gives us an entangled history that is relatively cinematic in its attitude towards association, Henrot's entangled history is post-cinematic, adopting the interface of the computer.

A comparison between Julien and Henrot allows us to consider how the capacity of moving images to put accepted histories and practices of collecting in disarray is changed in the shift to post-cinema. On this note, we shall point out that post-cinema is conceived not contrast or opposition to cinema, rather we employ the term to describe moving image forms that challenge and reframe the boundaries of the filmic apparatus, as it has been defined by classic theories in film studies. In other words, we do not see post-cinema as a subsequent step "after" cinema along a supposedly linear, progressive, and medium-specific history. We adopt post-cinema in a deontologising fashion to indicate the contamination of film with other media; the mixture of cinema and the computer in Henrot is a case in point. This is a key conceptual passage for us, as it allows us to focus on the media configurations resulting from this contamination process and their role in a media ecology. Contamination is a process that we find crucial for the study of the art/moving image nexus via the museum as both an institution and a representation. From an epistemological point of view, we also find the idea of post-cinema useful, as it has encouraged a rethinking of the scholarly tools and disciplines adopted to study works that are similar to those we aim to discuss in this text.[2]

In relation to the wider project of *Exposing the Moving Image* embraced at Film Forum 2018, we wish to posit that, formally and thematically, the artworks by Julien and Henrot address the issue of display and exhibition by way of an emphasis on the spaces where these dynamics take place. Looking at these spaces, we believe we are not only presented with a narrative – be it a story happening in a gallery or based on the collection preserved, archived and exhibited in a specific museum. Besides being places of self-reflection, self-representation and self-promotion, art spaces are, to us, sites where artistic moving images negotiate their identity. Of particular interest is the fact that museums are venues for entanglements to develop, and moving images are used to unfold them. In this essay we consider how the notion of entangled histories opens discussion up, towards interaction, interdependence and complexity. We show how a number of different spaces offer sites of contestation and negotiation, intersection, reference and cross-pollination. Accordingly, the works we discuss, allow us to argue that once it is "exposed" or exhibited outside the movie theatre, in art galleries and museums, the moving image becomes open to relational connections that are indisciplinary and fluid.[3]

Film/Museum Relations

Julien's installation and Henrot's desktop cinema were produced out of commissions from the museums whose collections they focus upon. In Julien's case, *Vagabondia* became part of a wider exhibition that actually took place in the John Soanes house museum in 1999. For Henrot meanwhile the documentary is inspired by the Smithsonian collection. It provides a kind of capsule museum visit, through procedures both cinematic (i.e. editing) and post-cinematic (i.e. computer graphic interface and internet-based aestehtics). *Vagabondia* and *Grosse Fatigue* offer examples of the lively exchange between museums and moving image artists that is now well established. Yet our artists present a new stage in the museum/artist relationship, which differs from previous ones because of its entanglement.[4]

In the wider field of museums and film Haidee Wasson[5] has outlined, in great detail, the impact that MoMA's decision to show films within the museum in the 1930s and then add them to its collection had upon several areas: the popular/art assumptions that divided filmmaking from museum art; practices of archiving and understandings of film history; practices of film viewing and those of collecting, saving and exhibiting films; and film's status as a museum object. What emerges from Wasson's study is the fact that MoMA's project contributed to debates around the status of film as a popular art, of film viewing as a serious intellectual activity and of film archiving as a valuable endeavor. MoMA achieves this by taking film off the streets and putting it in a museum. Even so, film does not really occupy a secure place alongside other art and artefacts. Instead, film is largely separate from the wider art collection and confined to a screening room.

Despite the importance of MoMA's initiatives upon film/museum relations, a relative aloofness remained between the two sides. A more profitable intermingling took the form of the 1950s "film d'art" or documentary about art objects (largely paintings). For Stephen Jacobs, in films about famous paintings (by Henri Storck among others) "a cinematic rather than pictorial logic prevails."[6] Cinema supplements painting and the resulting films are, according to Jacobs, "translations or transpositions rather than reproductions." Jumping forward to the early 1990s, in 1993 for his first foray into curation, director Peter Greenaway re-purposed the museum collection of the Museum Boymans van Beuningen creating an exhibition: *The Physical Self*. Greenaway brought a cinematic approach to the exhibition and he assumed the role of gatherer of images and objects. In his exhibitions Greenaway's role as gatherer is a constant feature. In 1991 he accumulated *100 Objects to Represent the World* for an exhibition at the Academy of Fine Arts, in Vienna, while back in the UK in Swansea less high art objects were gathered, from extra-cinematic props from Greenaway's films, to "historical artefacts borrowed from the rural and industrial museum collections, a counter for miners going down a pit and paintings turned to display their labelled backs."[7] As for much of his cinematography, Greenaway's exhibitions can be characterized by, first, their liking for list making and the gathering together of a mass of objects that it would be impossible for the viewer to look at, and second by the framing of those objects by light. Collection, light and the frame are all aspects that can be identified with the cinema. Further, in his exhibitions Greenaway has included actors/models sitting in glass cabinets. As he has said, Greenaway is creating pictures, but without a camera. In most of his early exhibitions there are no screens, only the arrangement of lights.

In the examples of the film d'art and Greenaway's forays as curator, the cinematic supplements the art. In the former, camera movements allow viewers to get close to paintings in a way that visiting them in the museum could not, while in the latter, lighting schemes and live models create a dramatic itinerary through the museum, as the space is treated as a kind of *mise-en-scène*. In contrast with these earlier encounters, a decade ago in 2007 an interesting group of filmmakers, artists and curators gathered at the Oberhausen festival to debate what is produced when cinema meets the museum. This gathering prompted Ian White to coin the term "Kinomuseum", using artists' cinema "to explore and represent the museum."[8] The emphasis of this project was slightly different to those that preceded it. White was interested in the space of the museum, and how moving images could fill that space. What he proposes is the infection of the museum by cinema which might produce "a differentiated cinema, a museum based on the principles of impermanence, immediacy, the temporal and the temporary."[9] Our interest differs from White's. Most pertinent to this paper is the change in attitudes towards the museum collection, which is seen as a site for invention and inspiration, hence the commissions for Julien and Henrot which, as we have suggested, focus upon representation and fictionalization.

Isaac Julien's Vagabondia

Isaac Julien's *Vagabondia* "continues his post-colonial exploration of the museum as a politically contested site."[10] Julien's first foray into the museum space was with *The Attendant* (1993) also set in a museum, that being Wilberforce House in Hull, England, which is devoted to the history of slavery. *The Attendant* sets the scene for a number of "museum-films" to follow. It uses paintings and other art from the museum as inspiration for sexual fantasies aroused in a middle-aged black male museum guard – or attendant – by a young white male visitor. Much of the action takes place after closing time. As the guard paces the galleries, a huge 19th century painting titled *Slaves on the West Coast of Africa*, by the French artist François-Auguste Biard, comes to life, its melodramatic scene of a white master bending over a dying black slave transformed into an up-to-date, leather clad sadomasochistic grouping.[11]

Seven years after Julian made *The Attendant*, *Vagabondia* joins *Baltimore* (2003), forming a kind of trilogy of films taking place in museums which take the broad terrain of black histories as their foundation. *Vagabondia* is set up as a visit to Sir John Soane's house-museum, putting on display artifacts collected by the eccentric architect of the Bank of England, whose fortune resulted partly from the slave trade. It is made on 16mm film and exists in the form of both a film for the cinema and an installation. The fact that Julien was invited to make work inspired by Soane's collection is interesting. As *The Attendant* shows, Julien frequently folds private desires and fantasies into more public histories. The personal nature of Soanes' collection suits Julien well and the *mise-en-abyme* motif ably captures the layered nature of the art and artifacts, standing as they do for both one man's idiosyncratic taste and tokens of the experiences of groups of people. Soane's collection is closer to the cabinet of curiosities model for collecting than that of a public museum; this makes the house and its spaces open for the fictionalization of which Julien is so fond.

In *Vagabondia* art and antiquities in John Soanes' museum are witnesses of Britain's colonial past, yet they are irreverently framed by, among others, Cleo Sylvestre as the conservator and a dis-embodied voice (actually Julien's mother) who speaks in Creole. Cleo literally opens our view into the collection by unfolding the doors of several cabinets that can be opened out. Throughout the film we follow a number of figures as they walk around the house, and at the end of the film Cleo closes the cabinet up. Evidently Cleo the conservator and Julien's mother have different entry points into past histories. Julien is not interested in any sense of "truth" or even biography, instead the personas who feature in his work provide different relational perspectives upon the past that are introduced through different textural and intertextual relations.

For the purpose of this analysis we are going to discuss the installation as if it were a linear experience, but we would argue that when it is shown in the gallery, where we can enter and exit as we wish, it can be divided into themed sections. At the start of the film Cleo takes her place in the foreground of a reproduced image of John Soanes seated at his desk. This opening scene illustrates the diegetic and spatial conjunction-as-method that Julien employs across his work – as one element is constantly placed in relation to another. Conjunction continues in this opening in two further sequences: first, we follow the museum's collector John Soanes (played by Julien's partner, curator Mark Nash) upstairs and second, we encounter Julien himself appearing in a photo where he stands next to the tomb of the ambivalent historical figure of T.E. Lawrence. These conjunctions are relatively simply defined, since they involve one person in the same frame as another (in the case of Nash this appears as an imaginative superimposition) and they could be said to define Julien's attitude to image-making, whereby he is interested in creating associations, and layers of expression.

Extending the observation that Julien works with conjunction, we could say that the split and multiple screens prompt their viewers to read elements in relation to each other. This notion of conjunction as method allows some room for a non-linear model, where multiple narratives intertwine, generating a complex entanglement. Here, in particular, it can be extended to encompass how we experience Julien's installations. Julien's split and multiple screens encourage us to read images in relation to each other. As well as including figures in the same frame, conjunction also operates in a more complex way if we consider the relay of looking apparent in the opening scene of *Vagabondia*. Hence, at the start of the film Cleo takes up her position in the museum but does not look at us, instead she looks off screen. It is not immediately apparent where the next shot, of a close up of swaying red material, comes from, until a minute later that is when we cut to the full shot from which this was extracted. In the full shot the camera begins the slow, lingering descent from the side of a woman's face across the back of her neck to between her shoulder blades, following the pleats of her red dress down to the floor, at which point she begins to move and we watch the edges of the heavy dress brush the patterned carpet. The camera then moves up to catch the woman sitting down next to another woman who we earlier saw leafing through a photo book. The impact of this shot reverberates across the opening few minutes, as it both contrasts with and adds to other moments, creating concentric ripples. First, the downwards trajectory of the camera contrasts with the shot that precedes it, in which Mark Nash – dressed as John Soanes – climbs stairs and we focus in close up upon his feet as he does so. The different directions of the camera movement in each shot – up with Soanes, down with the woman – suggests their different trajectories: if Soanes is a collector of objects and images then the woman is an observer of them; these trajectories intersect and resolve themselves in a complex and mutual relationship of representation and borrowing as the logics characterising the cinema/museum are basically transferred seamlessly from one to the other area and back.

The second way in which concentric ripples are created concerns the manner in which the camera moves across the red material, as if caressing it, producing haptic effects that contrast with the deepening and layering of other shots. Such effects are part of the sensory onslaught of Julien's work, which combines modes of expression: dance, music, voice, body, design, text, colour to create its narratives. Third, and finally, the shot plays a part in complicating systems of point of view. Not only have we seen the red material of her dress before in the opening scenes, the camera has actually given us her point of view in an earlier shot in which we approached the other woman, who looked up at us and then faced the photo book. The division of the earlier subjective point of view shot from this later shot of the woman's dress and movement creates multiplicity, and echoes to shifting the patterns of embodiment and disembodiment that cross the film.

Camille Henrot's Grosse Fatigue

Camille Henrot's *Grosse Fatigue* somewhat alludes to a sense of embodiment too. In this case, the reference is to an entity whose only embodied forms are either a hand that we see drawing and describing some shapes within and across the various windows appearing on screen, or the figures of museum employees in charge of the collections, their preservation, archive and display. These human traces are bearers of an agency which is mirrored by the formal choice of including the computer interface in the narrative, the graphic elements then strengthen this sense of agency by generating a pattern through which embodiment and disembodiment alternate across the film. This sense of embodiment is one of the many common threads between *Vagabondia* and *Grosse Fatigue* and is particularly relevant in the latter for both extra-diegetic and diegetic reasons. First, the allusion to the agency we see on screen links back to that of the visitor who is watching the video in the gallery.[12] Second, focussing on the on-screen element, the story told by the artist is directly related to a strong sense of physical presence in the world, that is, the creation of the universe.

Albeit experimental in style and form, the artwork offers a clear diegetic trajectory which develops over the 13 minutes of the video. Combining a variety of myths around the creation of the universe, the author employs the materials preserved in the museum collection alongside other artefacts, images, videos and documentation in a *crescendo* that moves from the egg – as the nucleus from which primal living beings have originated – to all species and, further, all artificial objects created by men. This is a rather complex narrative, however, it is worth mentioning it as it provides the basic pattern on which *Grosse Fatigue* and the subsequent iteration that followed in the form of an exhibition – *The Pale Fox* (2014) – develop. Also, remembering Julien's conjunction-as-method, the complexity and richness of such a narrative is very functional to the kind of aesthetic result we will discuss, since the many digressions, potential specifications and open-ended threads are expressed by a number of elements appearing on screen that are continuously placed in relation to each other. Such relation is created by way of a literal hypertextual style rendered by split screens and multiple computer windows that characterise the entirety of the diegesis. The same richness can be easily identified in the exhibition design of *The Pale Fox.*

Taking primarily the video into consideration, entangled histories are developed here according to a model that creates intersections along two axes in particular: a number of keywords and different "human stages" (fig. 138). The keywords include universe, nature, organs, symbols and forms, desire and various orders of perception, while the human stages refer to birth, childhood, adolescence, maturity, seniority and disappearance. The film reconstructs the chronology of creation in a summative and synthetic way by crossing these two axes and thereby producing relations of proximity among elements which would not otherwise appear to be connected.

The desktop interface plays a crucial part in bringing about the crossing that takes place. Diverse objects, shapes, colours and actions are held together because they appear inside multiple, co-existing windows. Because they overlap, these windows cause visual short circuits, expressed by Henrot through simple poetic images of glass balls clashing and bouncing off each other, a hard-boiled egg being peeled and two sets of hands leafing through two books on two different computer screens, flipped so as to create a mirroring effect. Entanglement works in a particular way: as Rey Chow suggests, "[t]his condition of overlapping recurrences [...] is invoked [...] to suggest *a topological looping together* that is at the same time an enmeshment of topics."[13] Henrot herself claims in an interview that when she started working on the script of *Grosse Fatigue* she compiled the history of the universe on the basis of the collection available at the Smithsonian but then this one narrative became "disjointed and almost schizophrenic."[14]

Entanglement allows for diverse threads to be woven in to a texture and for distant concepts to create new patterns of conjunction. This effect can be compared to the way in which the private and public are woven together in Julien's film. In both cases objects, images and artworks both stand alone and form new configurations thanks to the *mise-en-abyme*. This does not necessarily mean that it makes them close in terms of concepts and disciplines, nor does it rearrange them in proximity, rather we can say that both Julien and Henrot practice the "topological thinking" that Chow mentions. Equally, the *mise-en-abyme* aesthetics with which we began can be seen as a way to represent, convey and visualise the logics of partition Chow mentions in her definition of entanglement at the time of conjunction and partiality in a world of unavoidable intersections – it is the place of encounter of "the human desire to bring totality onto one's grasp [and] the void at the centre of such efforts,"[15] the site where all the variables and the elements addressed in the film contaminate each other.

Additionally, if looked at in their essential geometrical components, the multiple, co-existing windows may be seen as an assemblage of rectangles. As we know, because it creates a frame, this is a shape used to mark, to separate, to convey a sense of partition. (fig. 139) As Camille Henrot observes by way of commentary on her project *The Pale Fox* (2014), an immersive environment building on *Grosse Fatigue*,

> *The rectangle is the frame that demarcates civilization from nature, artwork from world, human from animal. The rectangle [she continues] is also the most common shape of exhibition spaces. This shape seems to communicate the authority of institutions, provoking artists to subvert the rectangle either by dividing the space or by introducing so much chaos that the shape disappears. The function of museums is to contain this subversion within the limits of the institution, just as the newspaper offers an image of the world's disorder enclosed in rectangular format.*[16]

Both the *mise-en-abyme* aesthetics and the curatorial choices that have determined the arrangement of Julien's and Henrot's artworks in the museum space are gestures of disposition that bridge diegetic and extra-diegetic dimensions, thereby bringing moving images and the museum into relation.[17]

We have touched upon how the split and multiple screens we find in Julien's *Vagabondia* convey a sense of multiplicity and allude to a notion of conjunction, whereby various screens and images made present at once for the spectator create a visible entanglement. In closing what we would like to claim here is that the scheme informing Henrot's *Grosse Fatigue* is the very emblem of this, and the manifold of multiple computer windows with which we are presented stand for a "conceptual knot." This knot strengthens the sense of complexity and implication among the various possible narrative threads, as well as between cinema and the museum. It calls for the necessity to conceive the relationship cinema/gallery beyond the *Kinomuseum* paradigm; that is, going beyond the simple representation of the museum on screen, as well as the mere location of moving images in art spaces. In order to undo the knots in which Julien's *Vagabondia* and Henrot's *Grosse Fatigue* tie us, we need to be willing to shake off the tendency to separate out past, present and future. Therefore the answer to our opening question, what do moving images do to museums? Would seem to be that it opens them out to associational logics.

Illustrations

138. *Grosse Fatigue*, schema, in *Elephant Child*, Exhibition Catalogue, Walther Koenig, Berlin 2016, pp. 180-181.
139. *Grosse Fatigue*, 2013 (video; color, sound) © ADAGP Camille Henrot. Courtesy the artist, Silex Films and kamel mennour, Paris.

Notes

[1] Rey Chow, *Entanglements: or, Transmedial Thinking About Capture*, Duke University Press, Durham 2012, pp. 1-2.

[2] Further details on the non-essentialist approach to post-cinema we adopt in this text are explored in Miriam De Rosa, Vinzenz Hediger, "A conversation on the 'posts' of post-media and post-cinema," in *Cinéma&Cie. International Film Journal*, vol. XVI, nos. 26/27, Spring/Fall 2016, pp. 9-20.

[3] Rancière uses this term as a response to the question of whether his work is inter-disciplinary or a-disciplinary, he answers: "Neither. It is 'indisciplinary.' It is not only a matter of going besides the disciplines but of breaking them. My problem has always been to escape the division between disciplines, because what interests me is the question of the distribution of territories, which is always a way of deciding who is qualified to speak about what." Jacques Rancière, "Jacques Rancière and Indisciplinarity," Trans. Gregory Eliott, *ART&RESEARCH: A Journal of Ideas, Contexts and Methods*, vol. 2, no. 1, Summer 2008, http://www.artandresearch.org.uk/v2n1/jrinterview.html, last visit 1 June 2018.

[4] Rey Chow, *Entanglements: or, Transmedial Thinking About Capture*, cit.

[5] Haidee Wasson, *Museum Movies: The Museum of Modern Art and the Birth of Art Cinema*, University of Chicago Press, Chicago 2005.

[6] Steven Jacobs, *Framing Pictures: Film and the Visual Arts*, Edinburgh University Press, Edinburgh 2011, p. xi.

[7] David Pascoe, *Peter Greenaway: Museums and Moving Images*, University of Chicago Press, Chicago 1997, p. 209.

[8] Mike Sperlinger, Ian White (eds.), *Kinomuseum – Towards an Artist's Cinema*, Walther Konig, Köln 2008, p. 26.

[9] *Idem*, p. 13.

[10] Bridget Elliott, Jennifer Kennedy, "Haunting the Artist's House: John Soane's Museum and Isaac Julien's *Vagabondia*," *Image & Narrative*, no. 16, February 2006, http://www.imageandnarrative.be/inarchive/house_text_museum/elliott_kennedy.htm, last visit 1 June 1018.

[11] On *The Attendant*, please see http://www.ttv-i.net/?p=1696, last visit 15 May 2018.

[12] It is worth recalling that *Grosse Fatig*ue is conceived by its author exclusively for a museum setting, thereby implying an off-screen dimension where the spectators are supposed to encounter and watch it.

[13] Rey Chow, *Entanglements: or, Transmedial Thinking About Capture*, cit., p. 1.

[14] Camille Henrot, video interview available online, https://youtu.be/bX5sm33JNLA, last visit 1 June 2018 (our translation).

[15] Michael Connor, *Preface* to *Elephant Child*, Exhibition Catalogue, Walther Koenig, Berlin 2016, p. 9.

[16] Camille Henrot, video interview, cit., last visit 1 June 2018 (our translation).

[17] Being a video conceived exclusively for the gallery, *Grosse Fatigue* implies a sense of spatiality that includes the room inhabited by the artwork and its viewers. Additionally, considering the piece as post-cinematic allows precisely its observation in relation to the constellation of artworks and iterations punctuating the narrative ecosystem it belongs to, for instance to the show *The Pale Fox*, which comprises indeed in and of itself a spatial dimension where the deictic connection between diegetic and extra-diegetic element we mentioned takes place.

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Exhibiting the *Disobedience Archive*: Video, Activism and Art

In the art world and in political activism, the word "archive" has become a generic metaphor for different kinds of collections of traces from the past. The proliferation of the archival form has been read as an "impulse with a distinctive character of its own is again pervasive – enough so to be considered a tendency in its own right" as written by Hal Foster.[1] A hypertrophic grown that has a seamlike interest in the scholars' production of essays regarding the archive and its multitude. An interest that, following the example traced by Michel Foucault, is usually addressed to the organising structure of the archives. This text considers how archival practices can be integrated further within current discourses of contemporary art, at a time when the concept of the archive is both more widely known and less fixed in its meaning. The function of the archive in the art world is often blurred and not completely clear. Thus, it seems to be needed to set a definition that is able to place the function of the archive not only in the hemisphere of memory and preservation. In the light of the complexity of the notion of archive, it is possible to read the function of the archive in its intertwining with the multiplicity of contemporary art, curatorial practices and activism – something that problematizes "[...] the display of heritage, historical glory and dead past."[2]

The present text will try to reveal some of the reasons behind the reconfiguration process of the archive in its relationship with the arts, taking into consideration a curatorial project that has embraced the archival form[3] in order to convey fragments of visual documentation of last decades' international protests. The *Disobedience Archive* (2005-2014) was a multi-phase project curated by Marco Scotini. Since 2004, the project was a guide of recent protests, from the social struggles in Italy in 1977 to anti-globalisation actions before and after the Seattle WTO Ministerial Conference of 1999.[4] In particular, the *Disobedience Archive* has been an investigation into the practices of art activism emerging from the fall of the Soviet block and the events of 9/11, that today are developing on a global scale. The project has travelled the world and in every location has preceded, run into or shared protest movements of recent years. Within the years, the project has been shaped and reshaped and the exhibitions of the archive became an occasion for the curator to experiment different displays for its streaming. Starting from this particular example and describing its different exhibitions displays and its very contradictory nature, the essay aims to stress the potential of political resistance, constituted by the role of the linguistic capabilities of this video archive. Step by step, it will be shown how the choice to produce multiple exhibition displays of an archive could be read as an additional engine for political activation in the present, and ultimately how this needs to be studied as a possible redefinition of the normative character of the archive itself. At the end of the text, it will be seen how, since its appearance, the medium of (electronic and digital) video established itself as an alternative mnemonic tool.[5] This part of the essay intends to provide insights into the counter-information capability of videos, by investigating the sections that form the *Disobedience Archive*, and wider in relation to activist documentaries.

The name

The nature of the *Disobedience Archive* seems to be quite controversial, and starting from the analysis of the project's name it appears to be evident that the proximity of the nouns "disobedience" and "archive" might be read as a contradiction in terms. As stated by Jacques Derrida, the word "archive" is derived from the Greek *arkheion*, the house of the magistrates: the place where the documents were kept, the place of the powerfulness.[6] An archive is a "realist machine," as Hito Steyerl stated, that preserves the history of the victors, while presenting it as historical reality or scientific truth.[7] An approach to historiography that makes use of the normative logic of the archive in order to affirm and confirm institutions and their role in society. Thus, how is it possible for the centrality and the dogmatic function of the archive not to come into conflict with the word "disobedience" and the act of disobeying? It has to be said that a very specific characteristic of the *Disobedience Archive* project is its cohesion with the mode of representation of power. What was once a sedentary concrete mass has now become a nomadic electronic (data) flow. In fact, and thanks to this change of paradigm, the notion of archive is not only in relation to historiography but, more urgently, to the present. The case study of the *Disobedience Archive* is symptomatic of a certain way to starch, squeeze, convert, stream and display an archive composed by videos that are, in turn, objects and the result of an archival research. Thus, the title contradiction helps us to read this specific archive as a site of knowledge production and political resistance, a contra-realistic machine that challenges the ruling of exclusive classifications.

Disobedience Archive *(2005-2014)*

In the first two chapters of the project in Berlin and Mexico City, respectively at Kunstraum Kreuzberg Bethaninen and at Sala De Arte Publica Siqueiros, and under the name of *Disobedience. An ongoing video library*, the choice to define it as a library is connected with its function of alternative and counter-information tool. Libraries exist to make their collections available to the people they serve. The exhibition displays of these chapters follow a very linear logic; almost all the monitors have been positioned in correspondence of a timeline that helps the visitor to chronologically situate the event (the file) she/he is using. In 2007, the *Disobedience Archive* was displayed during the exhibition *Forms of Resistance* at Van Abbemuseum in Eindhoven. The exhibition display has been initially conceived as a linear archival cabinet, an introflexed conception in which every monitor would have been a shelf of an expanded case. Lately the idea changed and the final result was an extroflexed container shaped as a line to follow – an intricate path that the visitor was encouraged to pursue in order to experience the files available. In 2008, the *Disobedience Archive* was part of *Remember Revolution 68-40*, a group show at Nottingham Contemporary, where the project offered six movements, and the videos from the archive were exhibited for the first time on flat screen monitors. Swiss artist Luca Frei created *Untitled (Interferences)*, a striking sculpture/design for the archive that exploited the space's large streetfront windows. Frei arranged the monitors on the surface of five black cubes. Each box extended the usual walls' surface of the gallery and transformed the linear path of the exhibition space into a sort of labyrinth. The Zagreb chapter of the *Disobedience Archive* exhibition has been hosted in the Meštrović Pavilion, a circular building that usually serves as the official seat of the Croatian Association of Artists (HDLU). The innermost ring of the building, just below the dome, was entirely dedicated to the archive. The exhibition display, designed by Czech artist Zbynek Baladran, constituted both literally and metaphorically a thematic, temporal and visual circular entity for the exhibition. The audience was guided on a rising circular walk on which were arranged both information and the video records of the archive. In 2009, *Disobedience. An ongoing video archive* was exhibited at the National Museum of Contemporary Art (MNAC) in Bucharest. The exhibition display was designed by the Milan-based collective of architects A12. For the MNAC exhibition, it was decided to leave aside the monitor-based exhibition in favour of large video projections. The option to explode the restricted scale of the monitor-based presentation was aimed at offering gigantic images capable of being mapped with electronic lights, a star-built architecture designed by A12. When the *Disobedience Archive* was exhibited in London at the Raven Row non-profit contemporary art exhibition centre in 2010, the artist Xabier Salaberria built a display inspired by the Soviet Pavilions of Lazar' Markovič Lissitzky, and recalling the exhibition designed for the first Documenta in 1955. In particular, Xabier Salaberria was inspired by the work that Lissitzky did in Cologne for the *Internationale Ausstellung des Deutschen Werkbund* (*Pressa*) in 1928. At that time, instead of building the Soviet Pavilion, Lissitzky rented the existing Central Pavilion, the largest building on the fairground. To make full use of it, the Soviet program designed by Lissitsky revolved around the theme of a film show, with nearly continuous presentation of the new feature films, propagandist newsreels and early animations, on multiple screens inside the Pavilion and on the open-air screens. Additionally, Salaberria re-enacted the first Documenta attic exhibition display, in which photographs of modernist architecture by Walter Gropius, Ludwig Mies van der Rohe, Frank Lloyd Wright, and others served as "epilogue" and depicted the useful application of the abstract forms expressed in the paintings and sculptures below. In 2011 at the Massachusetts Institute of Technology (MIT), the Urbanos Studio integrated the work done by some American students during several workshop sessions with more documents of local political and artistic actions with videos from the archive. The exhibition was conceived as a long garden strip, recalling the space of the camps and sit-in protests of the OCCUPY movement that was taking place at the time in Boston as well as in other city of the United States. In this brief excursus, we have seen how, each time, the display changed in order to host and disseminate the nomadic experience of the archive. The *Disobedience Archive* wished to take on awareness and share the self-empowerment practices, whilst reconstructing the protest. Every time the project has been streamed it has acquired new choreography aesthetics, of education and politics.

Two chapters of this exhibition experience have been designed by the French Italian artist Celine Condorelli and assumed the precise shape of a Parliament: in 2012 and 2013 at Bildmuseet Umeå and at Castello di Rivoli Museum of Contemporary Art in Torino, respectively with the titles *Disobedience Archive (The Parliament)* and *Disobedience Archive (The Republic)*. The word "parliament" derives from the French: *parler* – *parlement*: the act of speaking, the discussion. In this way, the activity and the space of parliamenting are interchangeable, and both inform and condition each other. It appears that the special organisation of formal assemblies has not changed substantially from the Athenian Assembly to the modern system of Kingdom and the parliamentary system of the nation-state era. Classical democracy, therefore, not only influenced the formation of later governmental systems, but it also created an architectural typology which has dominated both the form and the style of parliament buildings to present day. Its circular shape is meant to encourage the politics of consensus among political parties, rather than that of confrontation. This layout is used by most of the European Parliaments and by the United States. The equality in its shape – for instance, the equal distance from the speaker – is being used whenever "democratic dialogue" is anticipated or desired. These considerations on the history of parliaments and on their function are meant to reconsider the origin and the logics of the exhibition as a *dispositif* – one of the most established regimes for the public, the collective display of material culture. The parliament and the hemicycle could be inscribed in the modes of visuality that are part of a broader *scopic regime* of Western modernity. Nothing more than a segment in "a contested terrain," something that seems to be always under redefinition, "rather than a harmoniously integrated complex of visual theories and practices."[8] The institution of the parliament as a visual space served as linked site for the development and circulation of politics and its discursive formations (the past, the evolution, the man) as well as for the development of new technologies of vision and reception. Celine Condorelli realised her project considering indeed the nature of the *Disobedience Archive*. The *Parliament* and the *Republic* deal with the contradiction of political representation and the refusal of representation itself. Each video responds to the decline of the representative political model, even though hosted within a perfect reproduction of a parliament. Condorelli worked for a utopian display, a *dispositif* able to realise a temporary occupation, in which extra-parliamentary forces find out the rights to establish themselves as forces of creativity and experimentation: of languages, activities and subjectivities. The environmental installation is then at the same time an installation and an exhibition, something that performs the archive of the disobediences within a constructed context that engages its subject rather than displaying the archival record only for consumption. The last exhibition, *Disobedience Archive (The Park)*, took place at SALT Beyoglu in Istanbul in 2014. The exhibition occurred one year after the Gezi Park massive protests that interested the area around Taksim Square and Beyoglu neighbourhood, where the museum is located.[9]

A militant archive

The artistic and curatorial experience of the *Disobedience Archive* is linked to a wider and radical reconsideration of the historical notion of the archive in the field of contemporary art. In this case, the idea of a common archive is first of all a very militant idea in itself.[10] The proliferation of archives and the notion that anyone can be an archivist have to be considered a reaction to the conception of the archive as something intrinsically connected to power regimes and their control over the production of truth and knowledge. Thus, a militant archive is in this case a traveling archive, something that resembles the formation process of knowledge, that features the actual condition of the circulation of information and experiences, and that can be accessed by a large group of people.[11] The *Disobedience Archive* aims to shift the role of the archive itself, from a container of inactive records, a centralized repository, to a dislocated network devoted to the actualization of protests. It travels to promote new questions and not to provide easy answers. It has the form of an unstable structure, in a constant mobility. It circulates with always new formal properties, far from the architectural dimension of traditional archives. Contemporary practices are defined by the intersection between archivalism and activism.[12] In their everyday life, people seem to reclaim power through the purport to be active actors of possible and multiple archives. Thus, the production of several sites of testimony is not only an act of recording but also an act of performing. For these reasons, the intersection between archival activity and political activity has perhaps never been so endowed with the ability to demystify the productive discourse of power.[13] As a very close consequence to this equality, archival activism, by making otherwise privatized knowledge available and accessible, is a struggle in support of the very notion of common archive, because it allows for different ways of being and relating which are in disjuncture with the culture of capitalism, that captures every aspect of life through the logic of valorisation. For us, these are all militant archives in the making, to the extent that they are fundamentally connected to the awakening of a dissonant imagery – particularly now that political imagery has been in crisis for so long. It is evident from all the recent legislation passed to control and monitor the flows of information and exchange between people (whether under the pretence of security or copyright) that the central nodes of power recognize this only too well.

Exposibility

If we follow Jean-Francois Lyotard's definition of postmodernism as the loss of metanarratives,[14] it is also true that archival postmodernism could be assumed to be the context behind the content, something exploring the narrative and process that influence archival records rather than the content within them. Postmodernist archivists began to question the experiences and principles within the practice of archiving by bringing to the stage the problematic issue of representation.[15] The multiplicity of the *Disobedience Archive*'s exhibition display is tied to the impossibility of replacing a representation that embodies the acts of contemporary politics and aesthetics. According to Marco Scotini, this is true because the "exposibility" of things – their being staged and/or shown – nowadays has a paradigmatic value.[16] Something that Benjamin has defined as *Ausstellungswert*,[17] an exhibition value that replaces the cultural one. Thus, the act of displaying something is never neutral but always significant. Nowadays, in the attempt to try to overcome the dichotomy between the politicization of art and the aesthetics of politics, we may better proceed, according to Scotini, to a radical transformation of cultural production – an autonomous idea of art based on the coincidence between the action of working and the act of perception. In parallel to the function of archival *disposition*, another question becomes more and more central to the debate: how does an archive have the power to generate social and political change? A practice that, welcoming the multiplicity of records that are part of everyday life, contributes to develop a notion of the archive that, as sustained by Arjun Appadurai, may be described as an anticipation of intentional collective memory.[18] An aspiration that breaks with the institutional conception of the past. In this case, the question might be related to art in general, and it has been discussed endlessly over the centuries; nevertheless, it seems to have found a new meaning in the past few years, in light of the end of great narratives, and of the affirmation of a new articulation of protest in art.[19] In this very particular case, the *Disobedience Archive* vehicles one of the possible forms of political action for the multitude, meant as political subject as it is conceived by Paolo Virno.[20] A form without form, it could be stated, because this archival multiplicity may embody endless shapes and multiple possibilities. This idea of archive won't ever be just a repository of records and evidence because it has a well-distinguished political agency. It works as a critical *dispositif* that explores, preserves and promotes the relationship between cultural production, social movements and political actions. A counter memory tool that makes possible to discover branches of unveiled history. The archive is presumed to be effective politically in light of a different kind of relationship that characterizes the current phase of bio-capitalism, in which "…it is impossible to understand society's radical changes other than through the transformation of the languages it produces and has produced as both political subjects and *mediatised* object."[21] This archival practice or this employment of art as the archive of disobedience is supposed to display the marks of domination, leaving the comfort zone reserved for art to become a social practice.[22]

Profanation and dissensus

At this point, after an attempt to affirm the unity of the intellectual and material accessibility of the *Disobedience Archive* and its explicit political matter, we have to take a step back. The conception of art that emerged from the description of the *Disobedience Archive* as purely efficient, or the conception of the archive as functional for an alternative political efficiency, may lead the reader on a slightly different path. One may ask, why did artists become activists? Or, more specifically, what happens if we relate a reflection about a form of artistic production to the field of politics? The answers to these questions are in the intrinsic drive of art production, in its articulation, in its design, and in the shift of the aesthetic paradigms in post-modern societies. If the act of displaying something is never neutral, then we must retrieve the idea that the aesthetic act of disposition may be linked to an act of profanation of Schiller's idea of "aesthetic state."[23] Nowadays, the idea of "aesthetic state" turns out to transform itself into a pervasive machine that creates subjectivities within a wider and predetermined system of perception.[24] In his essay "In Praise of Profanation," Giorgio Agamben introduced the concept of profanation as a crucial political task of the present.[25] Profanation is a kind of political research on subjectivities able to deactivate the *dispositif*. The archive of disobedience, with its mutable shape, is meant to be a tactical tool for a new political subject, something that can be used to desecrate the *dispositif* of governmental biopolitics.[26] In this particular case, the act of profanation is part of a radical rethinking of two institutions (archive and exhibition) that are trapped in the regime of the *dispositif*. With the *Disobedience Archive*, Scotini has made use of the aesthetic rupture of art, or of the collapse of the modern ideal of aesthetic, in order to arrange a (different) form of political efficacy for art itself. Not for nothing, according to Rancière, the creation of the *dissensus* "is not the designation of conflict as such, but is a specific type thereof, a conflict between *sense* and *sense*."[27] A conflict that aesthetics may arrange and that leads us to perceive differently what is historically defined, because the aesthetics of *dissensus* consist in redrawing "the frame within which common objects are determined."[28] The goal is to improve the quality of democratic decision-making to achieve a level of political *visibility* through acts of *dissensus*. It is in this perspective, the *Disobedience Archive* affirmed itself not only as a video-library of last decades' international protests, but also as a common ground for artistic and political experimentation. An itinerant archive which is able to host, at the same time, art's demand for political visibility and its need for political analysis.[29] That is a delicate task and a balancing act that has been demanded to the inner quality of video (from the Latin *video*, "I see") as medium of information and counter-information. The medium, through which such things are made visible.

The video

Unlike the common idea related to video and mostly to early artists' usages of this medium, who were interested in specific technical possibilities of the video, like the closed-circuit, feedback or real-time playback, videos may have other functions.[30] Videos may be seen as a social technology, something that contributed to the enrichment of the distribution possibilities and to the availability of moving images outside of institutional contexts.

The appearance of video and the development of technologic devices such as Sony's Portapak had a great influence on the development of video art, guerrilla television, and video activism. These technological developments designate also a growth in artistic languages and a multiplicity of new possibilities for political struggles:

> *Even if we could accurately trace the technological history of video over the past three decades, video-making in the current context of transnational multimedia transmissions cannot be adequately captured, documented, or explained in a single language since the information on video is always a process potentially intermingling a plurality of image/sound repertoires which can be infinitely reprocessed and re-sited.*[31]

From today's perspective, it is possible to trace several different tendencies in early video-art production. Some of them were acknowledged to be very close to cinematic productions and therefore more useful in terms of cinematic[32] (tactical)[33] medium. Anyway, according to Catherine Elwes, the idea of video as a medium for political struggles and a political tool for artists and activists had always pervaded the aesthetics of video since its appearance:

> *Following Marshall McLuhan's vision of global communication, Paik and his contemporaries believed that they could harness the tools of mass media to awaken new, alternative social and political consciousness. Video art was born at a time of high personal and political faith. Artists and activists alike believed that their actions could make a difference to society.*[34]

Apart from its precise political manner, the *Disobedience Archive* testimonies how the moving image has become an important aspect of contemporary art. An archive using the medium of video embodies the collective response of artists to their time – to the powerful presence of media and technology, of television and cinema in mainstream culture. The openness of this particular archive collimates with some intrinsic aspects of video that make it the medium of dissemination of social and political issues. It represents artists' frustration with the exclusivity of art and its audience; their desire to bring art closer to popular culture and to engage more closely with real social and political issues.

The ten sections of the *Disobedience Archive* project: *1977 The Italian Exit*, *Protesting Capitalist Globalization*, *Reclaim the Streets*, *Bioresistence and Society of Control*, *Argentina Fabrica Social*, *Disobedience East*, *Disobedience University*, *The Arab Dissent*, *Gender Politics* and *Gezi Commune*, tell the (hi)story of four distinguished decades: the Seventies, the Nineties, the Two-thousands and the Two-thousand and Tens. The section *1977 The Italian Exit* focuses on revolutionary politics in Italy. Works such as *Il festival del proletariato giovanile al Parco Lambro Milano* (1976) by Alberto Grifi or *Ciao Mamma, Ciao Papà* (1977) by the Dodo Brothers seem to be, at the same time, political tools in students' and workers' struggles, and documents of each singular event. The affirmation of the medium of video as a device of memory[35] transforms these work of art in evidence of a political shift, and the roots of contemporary multitude can be traced back to the post-worker, radical-left movements in Italy, whose heterogeneous protagonists were no longer limited to factory workers. Artists were documenting and personally taking part in a political event, representing and acting politically at the same time.

At the threshold of 21st century, artists' works in video format reflect the preoccupations of an increasingly mediatised and politically disillusioned generation. Some of the sections of the *Disobedience Archive* resemble the political concerns that pervaded the art scene after the Nineties, a discernible re-awakening of political awareness in video art. In this case, the role of the *Disobedience Archive* includes revealing the mediatised nature of history. Some sections, like *Protesting Capitalist Globalization*, *Reclaim the Streets*, *Bioresistence and Society of Control* and *The Arab Dissent*, aim to reveal precisely what the corporate media, as the central agents of political authoritarianism, attempt to conceal or remove from sight. Thus, the video *Martyrs of the Egyptian Revolution* (2011) by the Mosireen Collective, a group of Egyptian activists and video makers, is a remarkable example on how to employ contemporary mobile video productions as a form of political struggle. An action that documents the facts of the so-called Egyptian Arab Spring, tapping directly into the energies of the spontaneous explosion of citizen journalism and cultural activism in the country – an artistic strategy that bypassed the state-controlled media.[36] In its multiplicity, the *Disobedience Archive* doesn't overlook singular and experimental cases such as *Get Rid of Yourself* (2003) by Bernadette Corporation. The video combines footage of rioting at the 2001 G-8 summit in Genoa with performances by Chloe Sevigny, Werner von Delmont and members of the Black Bloc anarchist group. The work is a meta-documentary or an anti-documentary, as it is called by its authors, that basically stresses how artists' works are able to reveal the distortions in mass-media news broadcasting and television documentaries.

Conclusions

Addressing the challenges of analysing Scotini's *Disobedience Archive* poses questions regarding the new role of aesthetics in the realisation of multitude political struggles. The redefinition of the notion of archive, as well as the confirmation of the role of the medium of video as a strategic political tool, are two of the achievements of this curatorial-artistic-activist project. Indeed, Scotini has tried to combine the speculative nature of contemporary social and political videos and their apparent ideological neutrality with the earlier forms of political video. The *Disobedience Archive* shows how contemporary artists may work independently of any social initiative, any organized campaign. Nonetheless, this multiplicity of intents and wishes address the issues of our contemporary age, often acknowledging the inherent contradictions of political work.[37] Whatever the final result, they end up to be part of an archive that shows how the history of the present needs to be a permanent inquiry on hidden conflicts.

Notes

[1] Hal Foster, "An Archival Impulse," in *October*, n. 110, Fall 2004, p. 3.

[2] Okwui Enwezor, *Modernity and Postcolonial Ambivalence*, in Nicolas Bourriaud (ed.), *Altermodern, Tate Triennal*, Tate Gallery, London 2009.

[3] Francesco Federici, defining the intersections between art practices and archive, is concerned to mark how, within the artist world, the archive is not only a physical place for artworks but also a critical framework for research. Federici suggests adopting the definition of "archival form" to better describe the complexity of archive in contemporary art. Francesco Federici, *Frammenti di cinema. Archivi e museografie d'artista*, ETS, Pisa 2018.

[4] The archive is divided into ten sections: *1977 The Italian Exit*, *Protesting Capitalist Globalization*, *Reclaim the Streets*, *Bioresistence and Society of Control*, *Argentina Fabrica Social*, *Disobedience East*, *Disobedience University*, *The Arab Dissent*, *Gender Politics* and *Gezi Commune*.

[5] Helen Westgeest, *Video Art Theory. A Comparative Approach*, John Wiley & Sons Inc., Malden-Oxford 2016, p. 60.

[6] Jacques Derrida, *Archive fever: A Freudian impression*, University of Chicago Press, Chicago 1996, p. VIII.

[7] Hito Steyerl, "Politics of the archive Translations in film," *eipcp*, June 2008, http://eipcp.net/transversal/0608/steyerl/en, last visit 31 December 2018.

[8] Martin Jay, *Scopic Regimes of Modernity*, in Nicholas Mirzoeff (ed.), *The Visual Culture Reader*, Routledge, London-New York 1999, p. 66.

[9] SALT Beyoglu is a Turkish contemporary art institution. It was founded by Vasif Kortun and

Garanti Bank in 2011. The Museum was shut down for two years between 2015-2017 and only in 2018 it restarted its activity.

[10] The *Disobedience Archive* has been defined "militant" because the project hosts films, videos and moving images materials that follow the line of the so-called ciné-geography. An interdisciplinary cinematographic practice of mapping the affinities, proximities and affiliations of ciné-cultures that emerged from and participated in the conflictual and connective militant politics of anti-colonial struggle and revolutionary decolonisation in the late 20th century. Kodwo Eshun, Ros Gray, "The Militant Image: A Ciné-Geography," in *Third Text*, no. 25/1, 2011, p. 2.

[11] Hito Steyerl, "In defense of the poor image," in *e-flux journal*, no. 10, November 2009, p. 7.

[12] Stéphanie Lemoine and Samira Ouardi use the term "artivism" to designate and catalogue new militant artistic movements in the public sphere. Stéphanie Lemoine, Samira Ouardi, *Artivisme: art, action politique et résistance culturelle*, Alternatives, Paris 2010.

[13] Tom Holert, "The Archival Multitude. Basel Abbas and Ruanne Abou-Rahme (in conversation with Tom Holert)," in *Journal of Visual Culture*, vol. 12, no. 3, 2013, pp. 346-347.

[14] Jean Francois Lyotard, *The postmodern condition: A report on knowledge*, University of Minnesota Press, Minneapolis 1984, p. xxiv.

[15] Terry Cook, "Fashionable nonsense or professional rebirth: Postmodernism and the practice of archives," in *Archivaria*, no. 51, Spring 2001, pp. 14-35.

[16] Marco Scotini, *Artecrazia. Macchine espositive e governo dei pubblici*, Derive Approdi, Roma 2016, p. 266.

[17] Benjamin argues that is thanks (or due to) photography if the exhibition's value overcomes the cultural value of an object. Cfr. Walter Benjamin, *L'opera d'arte nell'epoca della sua riproducibilità tecnica* (*Das Kunstwerk im Zeitalter seiner technishen Reproduzierbarkeit*, Edition Suhrkamp, Berlin 2013) Einaudi, Torino 2000.

[18] In the contemporary scenario of techno-digital evolution, Arjun Appadurai discusses the issue of the political function of the archive, stressing the importance of the its arbitrary use and not its supposed stability: "All design, all agency, and all the intentionalities that come from the uses we make of the archive, not from the archive itself." Arjun Appadurai, *Archive and Aspiration*, in Joke Brouwer, Arjen Mulder (eds.), *Information is Alive*, V2_/NAi Publishers, Rotterdam 2002, p. 15.

[19] Hito Steyerl, "The Articulation of Protest," in *eipcp*, September 2002.

[20] According to Paolo Virno, the contemporary multitude is a new political subject. It is not a class and it can't build a class consciousness of its own, but it may engage capital in a class struggle. And yet its very existence as multitude, distinct from "We, the People" (always predicated on the State) speaks of "the crisis of the form-of-state" itself. Paolo Virno, *Grammatica della moltitudine*, Derive e Approdi, Roma 2014.

[21] Marco Scotini, *Disobedient Images – Autonomia and the Politics of Representation*, SALT Research and Programs, Istanbul 2014.

[22] Jacques Ranciere, *Dissensus. On Politics and Aesthetics*, Continuum, New York 2010, p. 135.

[23] The Schiller's notion of aesthetic freedom is closely related to his theory about the aesthetic state as the ultimate form for the aesthetic education, a theory sketched out at the end of his 1794 *Aesthetic Letters*. The letters have been published for the first time in the journal *Die Horen* (1795, I January - February; II February; VI June).

[24] Fulvio Carmagnola, *Dispositivo. Da Foucault al Gadget*, Mimesis, Milano-Udine 2015, p. 53.

[25] Giorgio Agamben, *Profanazioni*, Nottetempo, Roma 2005.

[26] The concept of "governmentality" was developed by Foucault and defined as a specific form of exercising power, which operates through the production of truth. Michel Foucault, *Il governo di sé e degli altri. Corso al Collège de France (1982-1983)* (*Le Gouvernement de soi et des autres Cours au Collège de France. 1982-1983*, Éditions Gallimard et des Éditions du Seuil, Paris 2008), Feltrinelli, Milano 2015.

[27] Jacques Rancière, *Dissensus. On Politics and Aesthetics*, cit., p. 139.

[28] *Ibidem.*

[29] The institution of the political subject is one of the very first nucleus of what Rancière meant by "democracy." According to Rancière, the struggle must not take place in a world separate from the real world, but must rather enter into the contradictions of the police regime. The aim of art is to gain a clear position of visibility such as to impose itself on the whole community by redesigning its appearance or, in the words of Rancièr, its *partage*: "Artistic practices are 'ways of doing and making' that intervene in the general distribution of ways of doing and

making as well as in the relationships they maintain to modes of being and forms of visibility." Jacques Rancière, *The Politics of Aesthetics. The Distribution of The Sensible* (*Le Partage du sensible: Esthétique et politique*, La Fabrique-Éditions, Paris 2000) Continuum, London-New York 2004, p. 13.

[30] Erika Balsom, *Exhibiting Cinema in Contemporary Art*, Amsterdam University Press, Amsterdam 2013, p. 142.

[31] Johannes H. Birringer, *Media and Performance: Along the Border, Baltimore*, John Hopkins University Press, London 1998, pp. 145-146.

[32] From time to time, these cinematic video-art productions have been enclosed in different sub-categories, such as representational video-art or documentary medium. On the occasion of the exhibition *Vidéo et confrontation vidéo* (1974), held at the Musée d'Art Moderne in Paris, the video-artworks exhibited were divided into four groups: device, plasticity, representation and configuration. Donald A. Foresta, Dominique Belloir, Dany Bloch, Claudine Eizykman, Yann Pavie (eds.), *Art vidéo confrontation 74*, ARC 2 - C.N.A.A.V., Musée d'art moderne de la ville de Paris, Paris 1974. In 1977 Wulf Herzogenrath curated the video section of Documenta 6 (1977) dividing it into three subsections: video as mirror, video as documentary medium, and video as electronic medium. Wulf Herzogenrath, *Fernsehen und Video Das Doppelgesicht eines neuen künstlerischen Mediums*, in *Documenta 6*, BD 2, Kassel 1977, pp. 289-292.

[33] The approach of video-art towards political issues resembles something close to media-activist movement, that years later has been defined Tactical Media. The expression Tactical Media has been coined in 1996 by David Garcia and Geert Lovink. David Garcia, Geert Lovink, "The ABC of Tactical Media," in *Zkp*, no. 4, 1997.

[34] Catherine Elwes, *Video Art, A Guided Tour*, I.B. Taurus and Co. Ltd., London 2005, p. 5.

[35] Marita Sturken, *The Politics of Video Memory: Electronic Erasures and Inscriptions*, in Michael Renov, Erika Suderburg (eds.), *Resolutions: Contemporary video practices*, University of Minnesota Press, Minneapolis 1996, p. 3.

[36] Elisa Adami, "How Do You Watch a Revolution? Notes from the 21st Century," in *Journal of Visual Culture*, vol. 15, no. 1, pp. 69-84.

[37] Catherine Elwes, *Video Art, A Guided Tour*, cit., p. 175.

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Alternative Screens in Western Avant-Garde Cinematic Practices: A Media Archaeological Approach

> *The time will soon come that when we move, that film will be projected of course on the clouds. And that moving from film to reality, reality to film we will not know the difference, it's inexerable, it's inevitable that we will be surrounded with it. [sic]*
>
> Frederick Kiesler[1]

The dominant practice of exhibiting films on a flat, rectangular screen inside a movie theater has made us easily forget that there have always been considerable exceptions to this rule. Alternative screens as part of alternative exhibition modes have largely been overlooked in film studies, which tend to focus on textual analysis, authorship and spectatorship. Nevertheless, alternative screens have a long history of their own, as demonstrated by early cinema and avant-garde practices. Recently, Tess Takahashi has suggested that we "shift our gaze from medium-specific experimental works and the artists who made them to the screens on which experimental works appeared."[2] Such a change of perspective is tantamount to a "contextual turn," entailing "an important methodological shift away from a focus on the supposed autonomy of the text."[3] Based on a media-archaeological approach, my research investigates alternative screens in Western avant-garde cinematic practices so as to set up a discursive space for practices that challenge the traditional cinematic apparatus, or dispositive (*dispositif*). The goal is to examine this under-explored "otherness" that existed in parallel with conventional "flat" screens, and to (re)explore *site-based* rather than *sight-based* cinematic experience – that is, the historiography of screening spaces themselves, as opposed to what appeared on those screens. It includes not only the sites where these practices were encountered and received, but also the material and discursive practices that framed them.[4] The present essay is a short excerpt from my ongoing research.

In what follows, I will compare Austrian-American architect Frederick J. Kiesler's (1890–1965) *Film Guild Cinema* (1929) and American experimental filmmaker Stan VanDerBeek's (1927–1984) *Movie-Drome* (1965) in order to explore the *site-based* cinematic experience. Although Kiesler's and VanDerBeck's endeavors belong to two different periods of film history, the later work significantly echoes the earlier one, causing a "*déja-vu* effect," to use Miriam Hansen's (1993) term. The comparison of these two shows precisely how the "*déja-vu* effect" works, not only in a temporal sense, but in a spatial sense too. It also reflects the key argument of my research, which arises from the convergence of both architectural and media studies. On the temporal level, alternative screens within late cinematic experiments resonate with earlier experiments; on the spatial level, cinema and architecture are mapped on to each other. Thus too, the "*déja-vu* effect" takes place among two different disciplines.

Methodologically, I intend to intertwine two paths, namely, the *media archaeological path* and the *spatio-tem-*

poral path. The media archaeological path locates itself within a macro-historical point of view and includes the idea of non-linear temporality; the spatio-temporal path, however, finds its root in the micro-reconceptualization of time and space; it also serves as a connection between film and architecture. I hope then to 1) open a historical analysis that will result in a cross-disciplinary area of discourse for alternative screens in Western avant-garde cinematic practices, and 2) to examine the shifting territory between *sight-based and site-based* cinematic experience.

In the following, I will first look at scholarly discourses that have lead to a revision of film history, or more precisely to a revision of the historiography of screening spaces. Chief among these will be the so-called "Brighton Project." Second, I will approach the screen's past as an archaeological site and discuss this within a broader media archaeological context. Third, I will narrow my scope and address more specifically screen-related media archaeological research. And finally, I will present two chosen media archaeological sites and draw parallels between them for comparison.

The "flatness" problem

There seems to be a general agreement among film and media scholars about film's "flatness." The idea of flatness begins with both the filmstrip and the screen, and seems to be one of the main criteria used to account for film's "essence." Within the context of high modernism (Greenberg 1961), flatness is often taken as an indicator of cinematic specificity (Sitney 2002), and has become one of the features that distinguish film from the other arts. Though questions of cinematic medium-specificity are in decline today, film's flatness is still dogma. Screens as commonly understood are thought of as flat surfaces on to which projected images are received. Film possesses a powerful sense of projection, of course, and so, I want to examine those surfaces – flat or otherwise – upon which the projection takes place. It is worth mentioning too that a contemporary understanding of screens also includes screens that emanate light themselves, such as television monitors, computer screens or screens for handhold devices like mobile telephones.[5] However, the two screening situations are quite different: while the cinema screen requires darkness, the many others do not. My main, though not exclusive, focus lies on the projection that is based on photochemical film. Alternative screens exist primarily in non-entertainment, cinematic practices. Hence, the specific context of the exhibition space and how the screen appears within its surrounding space will be a focus of my investigation. Such a "site-based" approach foregrounds the physical space and highlights attributes such as spatiality, materiality, performance, liveness, hapticity, site-specificity, interactivity, immersion, multiplicity, and three-dimensionality.

Non-linear perspectives on the history of screens

Instead of taking a chronological or a genealogical perspective, I intend to access the screen's past from a non-linear perspective by adapting a media archaeological approach (Kluitenberg 2006; Zielinski 2006; Huhtamo and Parikka 2011; Ernst 2012; Löffler 2012; Parikka 2012; Huhtamo 2013; Elsaesser 2016). In order to establish a counter-argument to the screen's exclusive "flatness," this approach will serve to dig out forgotten fragments, overlooked discontinuities and under-investigated ruptures in relation to the screen's "non-flatness."

The media archaeological path refers to cinema's earliest days. Thomas Elsaesser, for instance, reminds us that there was 3-D (stereoscop) before there was 2-D.[6] 3-D or "transplanar" images encourage a sensuous contact with the screen, a sense of viewing that is perceived spatially. Moreover, if we leave early popular cinema aside and focus on non-entertainment cinematic practices, we discover numerous examples which question, challenge or eliminate "flatness" as part of cinema's allegedly exclusive pictorial essence; instead, they re-establish the cinematic aesthetic. It is important to note that before conventional screening practices became dominant, there were also alternative screening practices. An example is Dadaist film, which frequently combined screenings with live events. As Elsaesser points out, "not the film, but the performance is Dada."[7] He turns the ontological question "[w]hat is a Dada film?" into a temporal/historical one "[w]hen was a film Dada?" One should also add the locative question "where was a Dada film?" The combination of the *what*, the *when*, and the *where* aims to define Dada performances not in terms of their medium specificity, but as here-and-now experiences.[8] Such experiences reflect the Dadaist film "as a model or metaphor for representing the relation of body to social environment, or even for conceptualizing the art-work as event."[9] By turning the traditional screening into a Dadaist event, the Dadaist films are among the earliest endeavors to challenge not only film's "flatness," but other parameters too, such as the screen's impermeability, its placement, and so on.

Cinema emerged from out of a complexity of sources and then, retrospectively, was fitted into the frame of a linear history. The single-track assumption of linearity – which takes a variety of temporalities and embeds them into a certain cultural context – incorporates only certain significant events and disregards marginalized facts at large, either because they were forgotten, neglected or deliberately sealed over in history's dust-heap in order to justify certain ideologies. In order to fulfill a *critical* function, the search for alternative, non-linear temporalities becomes essential.

The 1978 annual congress of the Fédération Internationale des Archives du Film (FIAF), known as the "Brighton Project," was one of the crucial events to challenge the writing of a linear film history. Dedicated to "Cinema 1900-1906," scholars, historians and archivists unearthed and examined a trove of films from the period we now call Early Cinema, and revealed their sophistication and diversity from a heterogeneous group of perspectives. Charles Musser traced different kinds of "screen practices" back to the 17th century. Musser also coined the term "screen history" and proposed it as an innovative scientific discipline. Tom Gunning and André Gaudreault introduced the term "cinema of attractions" to address a particular mode of exhibition and to acknowledge early cinema's exhibitionist tendency and its outgoingness to the world of the spectator.[10] Although the cinema of attractions is largely indebted to what appears on the screen, Gunning also paid attention to the early showman-exhibitors' "offscreen supplements."[11] For example, the films presented at the *Hale's Tours* – the largest chain of theaters exclusively showing films before 1906 – not only consisted of "non-narrative sequences taken from moving vehicles (usually trains), but the theater itself was arranged as a train car, with a conductor who took tickets, and sound effects simulating the click-clack of wheels and hiss of air brakes."[12] In this case, such off-screen cinematic viewing experiences "relate more to the attractions of the fairground than to the traditions of the legitimate theater."[13] For Gunning, what early cinema and avant-garde practices share in common is the ability to produce "exhibitionist confrontation rather than diegetic absorption."[14] His digging out of a dynamic experience of space and time revalorizes the sensuous contact between viewer and film, still intact during cinema's early years. Gaudreault's revision of concepts such as cinema, early cinema,[15] primitive cinema,[16] etc., has also been an important source for the formation of the media archaeological approach.

The roots of media archaeology lie in Michel Foucault's *Archaeology of Knowledge* (1972) and Walter Benjamin's unfinished *Arcades Project* or *Passagen-Werk*, written during the 1930s (1982). In the 1990s, Siegfried Zielinski termed his unconventional approach to media history an "anarchaeology"[17] or "variantology," thereby expressing his uneasiness toward clearly demarcated disciplines. Thomas Elsaesser links the topic as well to the past as to the future by offering both, a "retrospective and prospective frame."[18]

If Musser coined the term "screen history" and claimed that it should become an academic discipline, Erkki Huhtamo went even further and argued that media archaeology with regard to the screen is inevitable. In an article entitled "Elements of Screenology: Toward an Archaeology of the Screen" (2004), Huhtamo explained that the "logic of attraction" was already essential for 19th century screens.[19] According to Huhtamo, the 19th century Phantasmagoria's use of the screen's invisibility, for instance, "was meant to dissolve the boundary between the reality [...] space and the world of fantasy." The screen functions as a gateway to "seduce and reward" spectators.[20] Not coincidentally, as Gunning pointed out, such logic of attraction was a prime quality that attracted the cinematic avant-gardes in the 1920s.[21] The screen was not always flat; it became so.

In his call for a "screenology," Huhtamo opened his article thus: "[A]n increasing part of our daily lives is spent staring at screens."[22] For many, it even takes a conscious effort to not gaze at a screen. In public and private spaces, screens increasingly mediat(iz)e the world we live in. Moreover, the more screens are present in our daily life, the less we pay attention to them. To an increasing extent, such a paradoxical "ever-present nonpresence"[23] phenomenon of the screen has penetrated our daily lives at large. On the socio-technological level, in our era of multimedia and big data, the screen's flatness itself has become a catchphrase. "Flat-screen" media of all kinds are now involved in shaping our ways of seeing and communicating, and these tend to be more and more passive and uncritical, a one-way information flow rather than an exchange. Our contemporary mass media consumption experience reflects the "technological structures and control mechanisms of late capitalism."[24] Many scholars, artists and independent filmmakers have stepped away from the moving image's flatness and are encouraging the spectators'/users' critical sensibilities in non-entertainment cinematic practices.

Site-based or sight-based

As previously mentioned, the goal of my research is to explore this under-explored "otherness" that existed and still exists in parallel with conventional "flat" screens, and to (re)explore *site-based* rather than *sight-based* cinematic experience. The watershed between both cinematic experiences lies in the fact that the former encourages the viewers' awareness of their participatory roles and critical sensibilities, the latter remains as the conventional one-way "feeding and diegetic absorption" relationship between audience and screen. Participatory spectatorship has often been associated with empowerment and liberation. In order to counter passive spectatorship, participatory viewing modes, be they interactive or immersive, have become more and more attractive to artists and scholars alike. The Whitney Museum of American Art's *Dreamlands: Immersive Cinema and Art, 1905–2016* (2016) exhibited works ranging from early hand-painted films to installations, sculptures, and performances. The exhibition linked various historical moments of experiments in "viewer-centric" and "spatialized" cinema (Weinberg and Brown 2016). By doing so, instead of offering *sight-based* cinematic experiences, the exhibition took cinematic space as a point of entry to form a *site-based* discursive visual perception. Earlier exhibitions expressing the same spirit can be found in Tate Modern's *Expanded Cinema Event in Tanks* (2009) and *The Tanks 2012*. Both events attempted to awaken the spectators' awareness of their physical presence in screening spaces. All three exhibitions emphasized a *site-based* spatial reception of the cinematic experience. Revisiting such alternative histories of filmmaking offers narratives of different social spaces and communication.

Of these three events, Tate Modern's *Expanded Cinema Event in Tanks* (2009) was the earliest. It included works by Steve Farrer (fig. 140), Tamara Krikorian, and Lis Rhodes (fig. 141), which "unfold through multiple modalities and heterogeneous spaces."[25] These artists and filmmakers started to challenge the conventional one-way feeding and diegetic absorption relationship between audience and screen, and encouraged the viewer to become aware of his and her participatory role. Screening does not take place in cinemas, but in art galleries, artists' studios, art or industrial fairs, warehouses, the open air, and even on street frontages and architectural façades.

Gene Youngblood and Sheldon Renan are considered as the originators of the term "Expanded Cinema." They conceived the term in a very broad sense including "video and television, light shows, computer art, multimedia installation and performance, kinetic sculpture and theater, and holography, to name a few forms."[26] Expanded Cinema is often characterized as liberating filmmaking from tradition and convention, or of liberating cinema from "the concept of standardization,"[27] as Renan would argue. Yet, the term "Expanded Cinema" has undergone a considerable shift of meaning from an all-embracing one to a much narrower one. VanDerBeek's *Movie-Drome* (1963-1965) (fig. 142) is considered as one of the first special venues for presenting cinematographic experience in an environmental manner. It was a "prototype for a new kind of cinema stage" or "spherical cinema,"[28] one that would demonstrate the artist's impatience with the limitations of the conventional single screen and his longing for environmental screens that would not only show a film, but also incorporate the spatial and environmental contexts in which that film is being watched.

The technical apparatus of the *Movie-Drome* was relatively unsophisticated. VanDerBeek ordered a pre-fabricated grain-silo kit and used its hemispherical aluminum top to build a domed theater in rural New York (Stony Point). The *Movie-Drome* was built on a wooden platform with a trap door in the floor, so that viewers could enter from underneath. The interior space was 31-feet high; multiple 16mm and 35mm film and slide projectors were arranged on a movable platform. Venturi writes of "overhead projectors for the drawings produced by the artist on sheets of acetate, slide carrousels and a dozen 16mm projectors handled by VanDerBeek from a central panel, just like sound and light."[29] The visitors took their places lying on the floor in a large circle, with their feet touching. VanDerBeek's collage of images – "combined willy-nilly found footage, filmed sequences of topical things and art historical slides,"[30] – floated in a three-dimensional cinematic space and bombarded the visitors, all of it distorted by the *Drome*'s ceiling. With multi-projections and multi-screens, a spatially and temporally unique cinematic experience was created. As a path-breaker, the *Movie-Drome* encouraged the audience's spatial engagement with the here-and-now cinematic experience. The "communication consciousness," as the artist called it, emphasized a multi-sensory experience over the visual. It was intended to cultivate the consciousness within the group, rather than focusing on the individual's narrative experience. The space pulsated with "undulating beams of light and discordant voices mixed with synthetic noise electrifying the air, illuminating darkened space and immersing the viewers in a continuous audiovisual flow, a visual velocity."[31] There was no clear boundary between where the cinema started or ended.

Interestingly, VanDerBeek's *Movie-Drome* significantly overlaps with a much earlier endeavor to challenge cinema's "flatness." In his *Film Guild Cinema* (1929) (fig. 143), Austrian-American architect Friedrich J. Kieslers had already attempted to use film to create extensions of environmental space. Located in Greenwich Village, the *Film Guild Cinema* was a small movie theater seating 485 viewers, and where independent art films were shown. Compared with other movie theaters at around the same time, the *Film Guild Cinema* was not perhaps particularly impressive in terms of size, but what made it special – thanks to Kiesler's various measures – was how the spectators found themselves totally immersed in a cinematic atmosphere. The main screen was unique because both its size and shape could be adjusted, depending on projection needs (fig. 144). In order to create an ideal cinematic realm, beside the conventional front screen, Kiesler had wanted additional virtual projections on the side walls and on the ceiling, all of which could function as extra projection screens if required by the program. Depending on the situation, the audience could find itself suddenly surrounded by projected images: for instance, the auditorium could be virtually transformed into the interior of a medieval Gothic cathedral, or a site of massed crowds; or it could view screens offering information about upcoming projections, and so on.[32] It would have been, acording to McGuire, "A Four Dimension Cinema"[33] designed for total film projection environments, or, in Kiesler's own words, "the spectator must be able to lose himeslf in an imaginary, endless space."[34] Due however to the client's budget restrictions, Kiesler's visionary design was never fully materialized, but, it does have important stories to tell. What Kiesler didn't fully realize in the 1920s, VanDerBeek brought into reality in Stony Point, New York in 1965.

According to Thomas Elsaesser, one can "fold film history around the 1950s and see how the two ends overlap."[35] There are striking parallels between early and later cinema, which can be as well applied to the history of film's "flatness." In my ongoing research, I will excavate two periods from the history of alternative screens and place them in parallel. The first begins with the classical avant-garde and moves back to the beginnings of cinema and even to pre-cinema, or, from the 1920s to the late 19th century; the second period looks forward and spans the period from the "Late Cinema" of the 1960s to the present time. "Late Cinema" is a term coined by Miriam Hansen (1993) and echoes the term "early cinema." Although the two historical periods are located at either end of film history, they also significantly overlap and intersect in a kind of "*déja-vu* effect." This term was also used by Hansen to address the fact that "the contemporary forms of media culture evoke the parallel of early cinema."[36] Within such a framework then, an examination of VanDerBeck's *Movie-Drome* echoes Kiesler's unrealized total film projection environment of the *Film Guild Cinema.* This is not at all accidental; it is as a kind of "*déja-vu* effect."

In conclusion, these parallels can be described as follows. Up to the 1920s, presentational and representational spaces were often tangled up in space, time and narrative. Instead of separating the *virtual* and the *actual*, they were fused. Early screen situations often created inviting, involving and interactive cinematic experiences. The cinematic avant-garde attempted to challenge the dominance of the institutional mass entertainment. By decomposing the illusory visual experiences, they criticized the dominant planar surfaces and their illusionary power. Since the 1960s, the alternative screens of Late Cinema have similarly striven for a renewed spectatorial consciousness. A shifting between *sight-based and site-based* cinematic experience thus appears across the history of cinema. Speaking from an architectural and a media studies background, I argue that the "*déja-vu* effect" is not only temporal, but also spatial. Therefore, to search for parallels not only between early and late cinema, but also between cinema and architecture becomes another key issue of my research. On the temporal level, the alternative screens within late cinematic experiments resonate with earlier experiments; on the spatial level, cinema and architecture are mapped on to each other, and between these two different disciplines the "*déja-vu* effect" takes place. I hope then to offer an historical analysis that will extrude an expanded cross-disciplinary placement for alternative screens in Western avant-garde cinematic practices.

Illustrations

140. Steve Farrer, *The Machine 1978*, installation view, Tate Modern Oil Tanks 2009, © Tate.
141. Liz Rhodes, *Light Music 1975*, installation view, Tate Modern Oil Tanks 2009, Photo: Tate © Liz Rhodes.
142. Stan VanDerBeek inside the "*Movie-Drome*," Stony Point, New York, 1965. © Stan VanDerBeek Estate.
143. Exterior of *Film Guild Cinema*, New York, 1929. © Austrian Frederick and Lillian Kiesler Private Foundation, Vienna.
144. Different forms of *Screen-O-Scope*, *Film Arts Guild Cinema*, New York, 1929. Photo collage. © Austrian Frederick and Lillian Kiesler Private Foundation, Vienna.

Notes

[1] No author indicated, "A Radio Broadcast Interview with Mrs. Kiesler: *Friedrich Kiesler's Involvement with Films – Leger, Ruttmann, Warhol*," in: *A Tribute To Anthology Film Archives' Avantgarde Film Preservation Program. An Evening Dedicated to Frederick Kiesler*, Museum of Modern Art, New York, October 19, 1977, p. 27 / American Film Institute, John F. Kennedy Center, Washington D. C. 1977.

[2] Tess Takahashi, "Experimental Screens in the 1960s and 1970s: The Site of Community," in *Cinema Journal*, vol. 51, no. 2 (2012), p. 167.

[3] Erika Balsom, *After Uniqueness. A History of Film and Video Art in Circulation*, Columbia University Press, New York 2017, p. 18.

[4] *Ibidem.*

[5] *Idem*, pp. 72-73.

[6] Thomas Elsaesser, "Media Archaeology as Symptom," *New Review of Film and Television Studies*, vol. 14, no. 2, Routledge, Abingdon Oxford 2016, p. 185, http://dx.doi.org/10.1080/17400309.2016.1146858, last visit 21 April 2018.

[7] Thomas Elsaesser, "Dada/Cinema?," in Rudolf E. Kuenzli, *Dada and Surrealist Film*, The MIT Press, Cambridge (MA) 1996, p. 19.

[8] Wanda Strauven, "Media Archaeology: Where Film History, Media Art, and New Media (Can) Meet," in Julia Noordegraaf, Cosetta Saba, Barbara Le Maître, Vinzenz Hediger (eds.), *Preserving and Exhibiting Media Art*, Amsterdam University Press, Amsterdam 2013, p. 61.

[9] Thomas Elsaesser, "Dada/Cinema?," cit., p. 14.

[10] Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde," *Wide Angle*, vol. 8, nos. 3-4, Fall 1986, p. 64, http://www.columbia.edu/itc/film/gaines/historiography/Gunning.pdf, last visit 24 June 2018. Or: Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde," in Thomas Elsaesser (ed.), *Early Cinema: Space, Frame, Narrative*, BFI, London 1989, pp. 56-62.

[11] *Idem*, p. 65.

[12] *Ibidem*.

[13] *Ibidem*.

[14] *Idem*, p. 66.

[15] André Gaudreault, "From 'Primitive Cinema' to 'Kine-Attractography,'" in Wanda Strauven (ed.), *The Cinema of Attractions Reloaded*, Amsterdam University Press, Amsterdam 2006, p. 89.

[16] *Idem*, p. 85.

[17] Siegfried Zielinski, *Audiovisions: Cinema and Television as Entr'actes in History*, Amsterdam University Press, Amsterdam 1999, p. 9.

[18] Thomas Elsaesser, "Media Archaeology as Symptom," cit., p. 17, http://dx.doi.org/10.1080/17400309.2016.1146858, last visit 24 June 2018.

[19] Erkki Huhtamo, "Elements of Screenology: Toward an Archaeology of the Screen," *ICONICS: International Studies of the Modern Image*, vol. 7, 2004, p. 36, http://gebseng.com/media_archeology/reading_materials/Erkki_Huhtamo-Elements_of_Screenology.pdf, last visit 24 June 2018.

[20] *Ibidem*.

[21] Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde," cit., p. 66, http://www.columbia.edu/itc/film/gaines/historiography/Gunning.pdf, last visit 24 June 2018. Or: Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde," cit., pp. 56-62.

[22] Erkki Huhtamo, "Elements of Screenology: Toward an Archaeology of the Screen," cit., p. 31, http://gebseng.com/media_archeology/reading_materials/Erkki_Huhtamo-Elements_of_Screenology.pdf, last visit 24 June 2018.

[23] Erkki Huhtamo, "Screen Tests: Why Do We Need an Archaeology of the Screen?," *Cinema Journal*, vol. 51, no. 2, Winter 2012, University of Texas Press, Chicago 2012, p. 145, https://c.ymcdn.com/sites/www.cmstudies.org/resource/resmgr/in_focus_archive/51.2_In_Focus.pdf, last visit 28 June 2018.

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[26] Jonathan Walley, "Identity Crisis: Experimental Film and Artistic Expansion," in *October*, no. 137, Summer 2011, p. 24.

[27] Sheldon Renan, *An Introduction to the American Underground Film*, E.P. Dutton and Co., New York 1967, p. 227.

[28] Jürgen Claus, "Stan VanDerBeek: An Early Space Art Pioneer," in *Leonardo*, vol. 36, no. 3, 2003, p. 229.

[29] Riccardo Venturi, "Rethinking the Expanded Cinema," *Critique d'art*, *Actualité internationale de la littérature critique sur l'art contemporain*, no. 45, 2016, p. 3, http://critiquedart.revues.org/19157, last visit 8 August 2018.

[30] *Ibidem*.

[31] Gloria Sutton, "Stan VanDerBeek's Movie-Drome: Networking the Subject," in Jeffrey Shaw, Peter Weibel (ed.), *Future Cinema: The Cinematic lmaginary after Film*, The MIT Press, Cambridge (MA) 2003, p. 136.

[32] Laura M. McGuire, "A Movie House in Space and Time: Frederick Kiesler's Film Arts Guild Cinema, New York, 1929," in *Decorative Arts*, vol. 14, no. 2, Spring/Summer 2007, University of Chicago Press, Chicago 2007, p. 49.

[33] *Idem*, p. 68.

[34] Frederick J. Kiesler, "Building a Cinema Theatre," in *New York Evening Post*, 2 Feberurary 1929.

[35] Thomas Elsaesser, "Afterword – Digital Cinema and the Apparatus: Archaeologies, Epistemologies, Ontologies," in *Cinema and Technology: Cultures, Theories, Practices*, Palgrave Macmillan, Basingstoke 2008, p. 229.

[36] Miriam Hansen, "Early Cinema, Late Cinema: Transformation of the Public Sphere," Linda Williams (ed.), *Viewing Positions: Ways of Seeing Film*, Rutgers University Press, New Brunswick (N.J.) 1994, p. 137, https://film7000.files.wordpress.com/2012/09/9-1-hansen_earlycinemalatecinema.pdf, last visit 18 August 2018.

Exhibiting Film History Today

Technès

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Introduction : TECHNÈS

Les membres du partenariat international de recherche TECHNÈS se sont donné comme programme de réintégrer la dimension technique dans la réflexion sur le cinéma. Ce projet n'est pas mené afin d'imposer une conception des techniques et technologies qu'il s'agirait ensuite de décliner en fonction des objets abordés. Au contraire, c'est un panorama des approches de la technique qui est offert par les chercheurs en études cinématographiques et par les professionnels des institutions (cinémathèques et écoles de cinéma, notamment) qui sont engagés dans ce programme. Il s'agit ainsi de se demander si la prise en compte du rôle de la technique mène à renouveler la perception des pratiques amateurs et des métiers du cinéma. Dans quelle mesure ce type d'approche permet d'approfondir notre connaissance des dispositifs techniques et de réinterpréter les discours portant sur le cinéma ? Pourquoi ces démarches conduisent-elles à écrire une autre histoire du cinéma et à repenser les approches esthétiques ?

L'Encyclopédie numérique bilingue, en cours de conception, est à comprendre à l'aune de cet énoncé introductif. En effet, celle-ci n'a pas pour vocation de saisir l'ensemble des pratiques, des appareils et des discours portant sur la technique depuis la fin du 19e siècle. L'Encyclopédie tend moins à introduire ses lecteurs à un ensemble de phénomènes à décrire qu'à un rapport problématisé à une diversité de sujets. Ainsi, les cinquante parcours thématiques qui la composent sont orientés par des questionnements propres aux chercheurs qui les dirigent. La dimension encyclopédique réside dans le fait de proposer tout à la fois un état des lieux de la recherche sur les techniques et technologies du cinéma et des pistes de réflexion afin de renouveler leur perception. Au cours des derniers mois, de premiers textes ont ainsi été rédigés, puis discutés avec le comité scientifique du partenariat. Des réflexions portant, entre autres, sur l'avènement du cinéma d'animation, sur le montage et sur le cinéma expérimental ont été formalisées.

L'une des originalités du projet encyclopédique engagé par TECHNÈS réside dans le fait que les contenus produits par les membres du partenariat ne prennent pas seulement la forme de textes. Il s'agit de contenus plurimédiatiques (extraits de films, entretiens filmés, représentation 3D d'appareils, numérisations de documents d'archives, etc.) dont la mise en forme fait l'objet d'une réflexion à part entière. Celle-ci a été placée au centre du panel présenté à Gorizia en 2018. Elle fait voisiner des problématiques propres aux études cinématographiques et médiatiques avec des questionnements relatifs aux transformations de l'édition en ligne, à la muséologie numérique, voire aux sciences de l'information et à la bibliothéconomie. Cette volonté de mettre en ligne non seulement des textes écrits par les chercheurs, mais aussi des documents, des sons, des images fixes et animées, nous a conduits à statuer sur les conditions de leur partage. Ainsi, une politique relative à l'usage équitable (Fair Dealing, en anglais) des contenus produits par des tiers a été adoptée par TECHNÈS en juin 2018. Elle revient à insister sur le fait qu'un certain nombre d'extraits de films, d'émissions télévisées, d'entretiens filmés produits par des tiers peuvent être librement partagés en ligne sous certaines conditions définies par la loi canadienne. Entre autres choses, les extraits en question doivent être courts (moins de 10% de l'œuvre) et surtout participer à la démonstration scientifique qui est mise en place pour l'Encyclopédie. L'adoption de cette politique nous a conduit à adapter les licences utilisées pour le partage des contenus textuels et audiovisuels produits par TECHNÈS. Ceux-ci sont ainsi mis en ligne sous des licences libres de façon à favoriser leur circulation dans l'espace public et leur appropriation par ceux qui s'intéressent aux thématiques abordées par le partenariat. Cela est valable tout autant pour les articles scientifiques que nous partageons, tant que faire se peut, via le dépôt institutionnel en ligne de l'Université de Montréal (Papyrus) que pour les entretiens filmés et les démonstrations portant sur le fonctionnement d'appareils cinématographiques (accessibles via Internet Archive).

Cela est également vrai pour la trentaine de numérisations 3D d'appareils cinématographiques dont la postproduction est en cours de finalisation. Ces dernières pourront être utilisées par d'autres à partir du moment où TECHNÈS est cité comme étant leur concepteur et qu'elles sont partagées sous une licence libre. Un tel usage est d'ailleurs déjà prévu dans le cadre d'un projet d'exposition virtuelle développé par la Cinémathèque québécoise.[1]

Au-delà de ces possibilités de partage, le travail mené sur ces représentations vise à leur associer des informations qui soient pertinentes pour les usagers.[2] Il s'agit d'annotations qui seront accessibles directement lors de la manipulation des représentations 3D en ligne. Un tel projet d'annotations est aussi conduit pour des démonstrations filmées d'appareils cinématographiques produites par TECHNÈS. Le but est que l'usager de l'Encyclopédie ne soit pas un spectateur qui consulte passivement un contenu partagé avec lui, mais qu'il puisse s'orienter au sein des connaissances mises à sa disposition. Ainsi, une représentation 3D le conduira à consulter un brevet, un manuel technique, une publicité ou encore une démonstration filmée. De même, quand il consultera une vidéo, les termes techniques utilisés, les gestes effectués, les objets manipulés le conduiront à des fiches documentaires et/ou à des définitions problématisées.

Il nous a semblé important d'insister sur ces aspects du projet, car ils sont au centre du panel qui a été présenté cette année à Gorizia. Il est tout aussi essentiel de noter que les autres dimensions du partenariat ont continué à se développer. Ainsi, la deuxième saison de l'émission télévisée *Connaissance du cinéma* a été diffusée par le Canal Savoir. La mise en relation de professionnels du cinéma de générations différentes a continué à porter ses fruits. Par ailleurs, un concours d'œuvres à destination des étudiantes des institutions partenaires de TECHNÈS a été lancé. Il s'agit d'une manière de voir comment la technique est utilisée ou thématisée dans des films, webfilms, installations et formes immersives/interactives. Ces œuvres seront valorisées aussi bien sur le site de l'Encyclopédie que par les cinémathèques partenaires de TECHNÈS.

De nombreux colloques et publications ont également eu lieu durant les derniers mois. La journée d'étude *Les usages sociaux des formats réduits* (Université Rennes 2) ainsi que les colloques *Documenter une présence au monde : le cinéma de Johan van der Keuken* (Université Rennes 2) et *Techniques du cinéma amateur : problèmes d'archive, problèmes d'histoire* (Université de Lausanne) se sont tenus en 2018. La publication de trois livres aux Presses Universitaires de Rennes : *Point de vue et point d'écoute au cinéma* dirigé par Antony Fiant, Roxane Hamery et Jean-Baptiste Massuet (Université Rennes 2), *Filmer la peau*, dirigé par Priska Morrissey et Emmanuel Siety (Université Rennes 2), *Le Dessin animé au pays du film* par Jean-Baptiste Massuet; et un livre avec Amsterdam University Press : *World Building : Transmedia, Fans, Industries*, dirigé par Marta Boni (Université de Montréal) sont à souligner. Enfin, deux premiers articles d'une série en partenariat entre le *Journal of Film Preservation* et TECHNÈS ont été publiés par Louis Pelletier (Université de Montréal) et Thomas Godefroy (Université Rennes 2).

Notons aussi que les chercheurs membres du partenariat ont présenté les multiples facettes du projet lors d'événements variés. Ainsi, une table ronde intitulée *Un dernier tour de piste : les appareils patrimoniaux en performance* a été présentée lors du festival *Il Cinema Ritrovato* de Bologne sous la direction de Louis Pelletier (Université de Montréal). Philippe Bédard, Rémy Besson et Annaëlle Winand (Université de Montréal) ont organisé un panel intitulé Éditorialisation de l'Encyclopédie TECHNÈS dans le cadre du colloque annuel de l'Association canadienne d'études cinématographiques. Enfin, le directeur du partenariat, André Gaudreault (Université de Montréal) et le directeur de la Cinémathèque québécoise, Marcel Jean, ont conjointement présenté les plus récents avancements du projet lors du congrès de la FIAF à Prague (2018). André Gaudreault a également eu l'occasion de présenter le partenariat lors de l'*International Symposium on Innovation in Interactive Media* (Federal University of Goiás, Brésil).

En collaboration avec les postdoctorants associés au projet Rémy Besson et Louis Pelletier (Université de Montréal).

Notes

[1] Projet intitulé *Le Monde remodelé par le cinéma* qui est financé par le Musée Virtuel du Canada (2018-2020).

[2] Cette réflexion a récemment été présentée par les étudiants – Patricia Bérubé, Joachim Raginel et Maxime Deslongchamps – en charge du projet lors d'une Vitrine Humanités numérique organisée par l'Université de Montréal (2018).

Marta Boni, Université de Montréal

Visualiser une base de données à travers une carte ? Propositions pour l'exposition numérique TECHNÈS

Introduction

Le projet d'encyclopédie TECHNÈS a pour objectif d'offrir aux utilisateurs (spécialistes et grand public) un ensemble de « parcours raisonnés » autour de l'histoire des techniques et des technologies du cinéma, soit des agencements de contenus, ou une forme *curatorielle* de construction du savoir à partir d'une vaste base de données. L'enjeu est de produire des outils pour explorer un ensemble d'informations visuelles (représentations 3D d'appareils cinématographiques, documents variés) et textuelles (travaux de recherche produits par les chercheurs) qui prend la forme d'une exposition virtuelle. Une des caractéristiques essentielles du projet est sa double dimension qualitative et quantitative : le point de départ est une base de données contenant un nombre très large d'informations que l'analyse des chercheures impliquées propose de rendre intelligible par la création de « parcours » qui *activent* certains des appareils et des éléments répertoriés dans la base.

L'expérience s'appuie sur le numérique qui correspond ici à un espace de négociation entre des collections (cinémathèques, musées, archives, collections privées), des producteurs de lectures savantes et des utilisateurs situés aux différents coins de la planète. Cet espace se doit donc d'être navigable et interactif. Afin de répondre aux besoins de l'interface numérique et d'en exploiter le potentiel de *création d'un espace*, il est donc capital de réfléchir à la dimension graphique de l'expérience proposée. Elle se donne comme en même temps intuitive et évolutive au fil de l'agrandissement de la base de données.

La lecture et la production de connaissances, lorsqu'elles sont pensées sous une forme visuelle, peuvent bénéficier de quelques principes, notamment la non-linéarité dans l'organisation des informations et la promesse d'une certaine intuitivité pour les internautes qui les consulteront, que la carte ou le diagramme, conçus tout à la fois comme représentation et comme performance, peut faciliter. Nous allons donc nous intéresser à la façon, sémiotique et pragmatique, par laquelle la cartographie ou une vision géographique peut s'adjoindre à la production des parcours de l'encyclopédie TECHNÈS, avec une attention particulière pour le design et pour l'expérience des utilisateurs. De manière plus large, on explorera le potentiel heuristique (recherche d'informations selon une tactique adaptée à la situation de départ) et herméneutique (possibilité de faire émerger des informations nouvelles) de la carte, lorsqu'elle est pensée en lien avec une analyse d'objets audiovisuels.

Quantité et complexité

Travailler avec une base de données signifie gérer des questions de quantité – un nombre d'informations trop grand pour être saisi directement – et de complexité – des informations liées entre elles et des significations qui émergent de la connexion des éléments.

D'abord, remarquons que le contexte contemporain, étudié à partir du *Visual Turn* dans les sciences humaines, nous encourage à considérer la quantité de données désormais présentes dans les espaces numériques, ainsi qu'à développer des manières de les visualiser. L'étape de la visualisation devient précisément le moment auquel les données acquièrent une valeur unique, adaptée à la situation dans laquelle elles sont présentées, avec une attention pour leur ergonomie. Aujourd'hui, avec l'arrivée d'instruments numériques et des *big data*, les cartes sont de plus en plus souvent utilisées par les chercheurs en sciences humaines pour interpréter des ensembles d'informations très larges. L'utilisation d'analyses géospatiales et d'outils de visualisation est d'une importance capitale pour dépasser l'opposition entre une approche qualitative et une approche quantitative. Les informations ne signifient pas toutes seules : au contraire, c'est leur organisation qui leur donne un sens.[1] C'est ce qu'Anne Burdick, Johanna Drucker, Peter Lunenfeld, Todd Presner and Jeffrey Schnapp montrent lorsqu'ils décrivent l'état des recherches dans le domaine des humanités numériques. Le concept de *design de connaissances* est particulièrement pertinent ici : selon Schnapp, une fois que l'information est découverte et extraite, afin qu'elle devienne compréhensible, elle doit passer à travers une mise en forme (*design*) qui donne accès à l'architecture de l'information du corpus ou de l'ensemble des données. Des exemples de façons par lesquelles les données sont répertoriées, rendues cherchables et visibles dépend largement du domaine d'application et des outils développés, mais elles tendent toutes vers la création d'un récit à partir des données. Le récit peut se donner sous une forme linéaire ou non-linéaire, conformément à une pratique de spatialisation de plus en plus présente dans les usages du numérique. La cartographie apparait dans ce sens comme une pratique, déjà clairement liée aux modes de représentation visuelle cinématographiques,[2] très productive pour communiquer de l'information dans l'espace numérique et pour donner une forme non-linéaire à ces récits produits à partir d'informations variées.

On peut dès lors se demander : quelle est la place de la carte dans ce cadre, et quelle est son utilité par rapport à une vaste base de données sur les techniques et les technologies du cinéma dont l'objectif est de fournir une série de parcours interactifs ?

L'enjeu est aussi de fournir une manière de gérer la complexité des informations, ou la possibilité que des résultats de l'ordre de la création de nouvelles connaissances émergent de l'agencement imprévu de ses éléments. Considérons ce que le géographe MacEachren propose au sujet des cartes : « Lorsque nous construisons ces représentations abstraites… nous sommes en train de révéler mais aussi de créer de la connaissance ».[3] Les cartes ont une fonction représentative de données existantes, pour les explorateurs qui les dessinent ; mais aussi, lorsqu'elles sont offertes à des utilisateurs, elles peuvent devenir des points de départ pour de nouvelles interprétations. Le *deep mapping* est utilisé en histoire de l'art et en histoire culturelle pour déterminer la fréquence, la distribution et la temporalité de phénomènes variés. Ainsi, les cartes aident à rendre compte de nœuds et de connexions visibles, soulevant des questionnements que les approches purement qualitatives ou des analyses portant sur un nombre limité d'objets ne seraient pas capables de révéler. Les techniques de calcul et de visualisation peuvent devenir très efficaces pour déterminer la forme et la taille de phénomènes à large échelle, que la géographie peut nous aider à organiser. En même temps, elles peuvent aider les chercheurs en histoire des médias à mettre en évidence des liens avec d'autres systèmes qui se superposent au phénomène étudié et qui finalement peuvent apparaitre comme des résultats émergents.

Ainsi, l'opposition entre linéaire et non-linéaire et les fonctions de représentation et de performance sont les bases autour desquelles s'organise une réflexion en mesure de prendre en compte la cartographie – ainsi que les diagrammes, pensés comme organisation graphique d'informations connectées – comme options pour produire de la connaissance à partir de la grande quantité de données. Loin d'être seulement des représentations, les cartes peuvent être comprises, suivant l'approche constructiviste, comme performatives, car elles permettent d'organiser l'information, donc de la créer. C'est dans l'alliance de ces multiples fonctions qu'elles deviennent des outils intéressants dans le cadre d'une exposition numérique.

Cartes de musées/Musées dans une carte

Avant de décrire les possibilités d'une exposition numérique, remarquons que la carte en tant qu'outil muséal est un sujet de recherche qui nous permet de souligner des concepts non-dépendant du numérique et qui peuvent se révéler intéressants. En effet, les cartes ou plans des musées ont une fonction cruciale d'orientation des visiteurs d'un musée et ainsi de révélation des œuvres.

La carte d'un musée offre une représentation visuelle d'un espace physique, utile aux visiteurs qui peuvent ainsi s'orienter, effectuer des choix pour leurs arrêts à des œuvres déterminées, afin de construire leur exploration de l'espace. La visite d'un musée requiert constamment un questionnement concernant l'espace, et la façon de construire celui-ci. Il s'agit d'une appropriation, au fil des couloirs et de la sélection des arrêts effectués par les visiteurs. Mais est-ce qu'une carte peut faire plus que nous orienter ou nous guider ?

La carte peut devenir une exposition elle-même, organisant et composant plusieurs chemins. La carte peut être l'expérience. C'est de plus en plus ce que l'on voit dans les musées : par exemple, le Louvre, en plus de plans navigables offerts sur son site officiel, offre, sur place, la possibilité d'emprunter un Nintendo 3DS, appareil né d'abord pour des activités vidéoludiques qui devient ici carte interactive pour naviguer au sein des œuvres et en faire une expérience en réalité augmentée, donnant accès à des informations supplémentaires. Contrairement à l'audioguide classique, le support (audio)visuel est ici fondamentalement performatif : l'utilisateur maîtrise l'espace, choisit comment en faire l'expérience, conformément à l'origine ludique du dispositif :

> *The software can be used in all sorts of ways: simulate your route around the museum before visiting, or simply use it as a starting point for developing a deeper appreciation of art.*[4]

La simulation est proposée comme façon de préparer une visite dans un espace particulièrement complexe car trop riche en contenus : on suggère en fait d'« étudier » à l'écran chaque étage avant de s'y rendre, ou d'utiliser le dispositif comme complément, didactique, d'informations (fig. 145).

> *Wonderful photographs and audio commentaries allow you to appreciate the Louvre's artwork at your own pace. Use the provided floor maps to find your way around the museum, and even take a virtual tour of the Louvre's enormous exhibition spaces. The software also includes 3D models and high-resolution images of certain artworks, making it an enjoyable experience that's only available on Nintendo 3DS !*[5]

La *ludification* des expériences muséales met donc l'accent sur la dimension navigable, labyrinthique et sur le geste performatif que cette dimension requiert de la part des utilisateurs. La carte peut donc être conçue comme le territoire dans lequel une expérience a lieu, point de rencontre et de visualisation de plusieurs pistes thématiques à l'intérieur d'un ensemble de contenus trop riches pour que les utilisateurs en fassent l'expérience au complet.

C'est ce que le Louvre a produit avec l'exposition « La Méditerranée dans les collections du Louvre »,[6] parcours thématique ayant pour ambition de « réunir des œuvres témoignant des grands moments de civilisation que le monde méditerranéen a connus » (fig. 146).

Comme on lit dans la description de l'expérience, les cartes ont accompagné le parcours d'exposition et illustré le catalogue pour l'étape au Tokyo Metropolitan Art Museum. La carte devient aussi un guide pour une exploration thématique, ainsi que la trace et l'archive de l'exposition, dans un espace numérique, contribuant à la pérennisation de la connaissance développée dans le cadre de l'événement, et ce une fois l'exposition terminée. Négociation d'usages et de lieux différents, donc, par la création d'un espace numérique que la carte non seulement rend accessible, mais qui est de facto incarné par la carte. Si une comparaison complète de ces exemples avec le projet de l'encyclopédie TECHNÈS ne serait pas fructueuse, car dans notre cas il ne s'agit donc pas d'un projet muséal comme celui d'une institution illustre comme le Louvre, quelques remarques sur la production d'outils cartographiques peuvent être pertinentes ici.

La carte comme solution pour rendre visible une base de données

Comme nous le soulignions plus haut, l'exposition en ligne de TECHNÈS correspondra à un espace numérique qui négocie une relation entre des objets réels, conservés dans des musées ou des cinémathèques, et des utilisateurs localisés à différents endroits, avec la médiation des « parcours », centrés sur les textes des chercheurs. Ces parcours portent sur des sujets aussi différents que les suivants :

- Le montage argentique à l'époque du muet
- Cinéma de réemploi
- Cinéma d'animation sur pellicule
- Industrialisation du dessin animé aux États-Unis
- Jean-Pierre Beauviala et la société Aaton
- Le cinéma direct : la période expérimentale et après
- Couleur et cinéma amateur
- Caméra 35mm de studio
- Bricolage dans le cinéma expérimental
- La société Bolex
- Les caméras d'action
- Database narrative and beyond
- Editing in the Digital Age

Dans la plupart de ces parcours, la dimension géographique est présente dans les informations de la base concernant les artéfacts liés à ces thèmes. Les principales métadonnées qui vont être géolocalisées avec une URI (URI Geonames) correspondent aux institutions de conservation des artefacts (principalement des cinémathèques) et le lieu de création des contenus médiatiques produits par TECHNÈS (entretiens filmés, numérisations 3D, etc.). Une carte géographique, croisée avec une frise chronologique, sera donc utilisée comme point de départ pour rendre visibles ces informations, permettant de dépasser la dimension tabulaire de la base de données et de restituer la dimension en réseau de ses contenus. L'objectif étant de rejoindre chercheurs et grand public, l'encyclopédie voulant offrir une « conception visuelle et spatialisée de l'histoire du cinéma », comme on lit dans le cahier des charges du projet. Mais, lorsque les informations sont présentes, nous pourrions aussi suivre les trajectoires des appareils, décrivant l'histoire de leurs déplacements successifs et l'histoire de leur production, usages, archivage et conservation à travers le monde. Cette information géographique se superpose aux approfondissements de nature thématique des « parcours ». Ces informations pourront créer automatiquement d'autres « parcours », cette fois géographiques, qui relieraient des artéfacts différents, de manière inattendue.

Un autre usage dans le cadre du même projet pourrait être la localisation de discours – commentaires, traces des usages, critiques – concernant un appareil spécifique, afin de définir la présence de celui-ci dans un espace-temps défini.

Lorsque cela est pertinent, la localisation des appareils ou des documents apparaît donc comme une nouvelle manière d'accéder aux artéfacts et aux lectures savantes, par exemple par la sélection, par l'utilisateur, de zones géographiques de son choix. Si le corpus peut être lu de manière linéaire, une fois qu'il est transformé en points d'une carte, il peut être consulté de manière plus intuitive.

Dans ce sens, la carte favorise le geste heuristique des utilisateurs et se base sur une logique d'informations en réseaux. Premièrement, elle permet de passer de la forme tabulaire de la base de données à une forme de consultation spatiale, non narrative, qui met en évidence certains éléments qui ne seraient pas visibles dans le cadre d'une liste. Les « parcours » pouvant prendre des formes variées (linéaires et plus similaires à un article scientifique classique ou moins linéaire comme une exposition en ligne), la carte offerte dans la page d'accueil deviendra le point de départ pour une appréciation globale des « parcours » et un moyen de s'orienter à travers ceux-ci.

Sélection, Simultanéité, Relation

La carte permet une utilisation de l'information qui est de l'ordre de la navigation et de l'exploration, dans laquelle les utilisateurs ont le pouvoir de créer des connexions, conformément à la nature en réseau de la base de données. La carte est « open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification… A map has multiple entryways, as opposed to the tracing, which always comes back to the same ».[7]

Il est donc important d'identifier des points d'accès, de considérer les données comme des points de départ pour des interprétations, et comme des nœuds dans un réseau. Une conception cartographique est utile car elle permet de penser le projet de manière organique, comme un espace rassembleur de données concernant des appareils et, tout à la fois, des « parcours ». Chacune des données devient un point d'entrée dans l'exposition, favorisant la sélection, de la part des utilisateurs, des informations jugées pertinentes, et la mise en évidence immédiate des relations possibles : les parcours similaires, les connexions entre appareils ou localisations géographiques suggéreraient d'autres pistes à parcourir, d'autres manières d'activer la base de données (fig. 147).

Si le récit est traditionnellement une organisation séquentielle d'événements, les cartes servent comme point de départ pour faire surgir des questions et des réponses possibles. La carte, ainsi conçue comme point d'entrée de l'exposition, permet d'activer plusieurs récits spatiaux, des manières de rendre visible parallèles à des lectures « signées », qui offriraient une multiplicité de nœuds à choisir, chacun desquels renverrait à l'ensemble de la collection ainsi qu'aux entités individuelles. Dans ce sens, les cartes sont un outil représentatif, mais elles sont aussi des moteurs de recherche performatifs, qui favorisent la création d'un réseau et de connexions.

Cette opposition, seulement apparente, mérite d'être approfondie dans la phase de création de l'interface numérique. En effet, la forme que nous donnons, en tant que chercheurs, aux informations est cruciale en ce sens et doit, d'une part, favoriser la création d'un sens voulu, suivant une fonction pédagogique, dans le cadre des différents parcours et, d'autre part, laisser aux utilisateurs la possibilité de naviguer le corpus. Une application en littérature, déjà largement discutée, est celle du *distant reading* proposé par Franco Moretti[8] dans lequel des modèles abstraits et des formes de visualisation graphiques comme des graphes et des arbres permettent de souligner des connexions entre des corpus très larges et donc de construire une histoire de la littérature alternative à l'analyse de textes classique : la dimension heuristique de la proposition de Moretti est potentiellement intéressante, dans le sens où elle ouvre une discussion nécessaire sur la manière de représenter les dynamiques d'un système culturel (un genre littéraire dans son évolution, par exemple), mais aussi, et surtout pour les découvrir. Notamment, à travers l'emploi d'instruments graphiques, nous pouvons obtenir des résultats émergents. Le concept a été développé dans le cadre des théories des systèmes complexes par Edgar Morin qui, suivant Jacques Monod, définit les émergences comme des « qualités et des propriétés qui apparaissent une fois que l'organisation d'un système vivant est constituée, des qualités qui évidemment n'existent pas lorsqu'elles sont présentées isolément ».[9] Identifiant les émergences dans un système donné, nous pouvons trouver des éléments significatifs du point de vue de la recherche qui peuvent renforcer la création d'un « parcours » et qui peuvent aussi permettre aux utilisateurs de naviguer de façon alternative dans le corpus des données.

Conclusions

Afin de créer une interaction avec une base de données, de nombreuses possibilités existent. Dans le cadre de l'exposition TECHNÈS, la création d'une carte est potentiellement très productive, car elle permet de créer un récit non-linéaire, en parallèle à des « parcours » structurés de manière plus classique. Tout en imposant une vision géographique, la carte semble garantir la possibilité d'organiser les informations sur un mode visuel, rendant compte de la localisation et de l'origine des objets présentés. L'exposition numérique devient davantage liée à une dimension spatiale, mais en même temps indépendante de la localisation des artéfacts originaux dans leurs lieux de conservation, garantissant un accès plus large et plus modulable. Le projet étant en développement, il reste à voir comme l'outil produira des usages spécifiques qui confirmeront ou infirmeront ces hypothèses.

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Illustrations

145. Guide du Louvre Nintendo. http://louvreguide.nintendo.com/.
146. Exposition organisée par le musée du Louvre du 20 juillet au 23 septembre 2013 au Tokyo Metropolitan Art Museum, et du 29 octobre 2013 au 10 février 2014 au National Museum of China. https://www.louvre.fr/routes/la-mediterranee-cartes-de-l-exposition.
147. Création de récits spatialisés à partir d'une base de données.

Notes

[1] Anne Burdick, Johanna Drucker, Peter Lunenfeld [et al.], *Digital_Humanities*, MIT Press, 2012, p. 153. Johanna Drucker, *Graphesis : Visual Forms of Knowledge Production*, Harvard University Press, Cambridge (MA) 2014, « MetaLABprojects ». David J. Bodenhamer, John Corrigan, Trevor M. Harris (sous la direction de), *Deep Maps and Spatial Narratives*, Indiana University Press, Indianapolis 2015.

[2] Tom Conley, *Cartographic Cinema*, University of Minnesota Press, Minneapolis 2006 ; Teresa Castro, *La pensée cartographique des images : cinéma et culture visuelle*, Aléas, Lyon 2011 ; Giorgio Avezzù, *L'evidenza del mondo. Cinema contemporaneo e angoscia geografica*, Diabasis, Parma 2017.

[3] A. M. MacEachren, *How Maps Work : Representation, Visualization, and Design*, The Guilford Press, New York 2004, p. 156.

[4] http://louvreguide.nintendo.com/, dernier accès 5 octobre 2018.

[5] *Ibidem*.

[6] Exposition organisée par le musée du Louvre du 20 juillet au 23 septembre 2013 au Tokyo Metropolitan Art Museum, et du 29 octobre 2013 au 10 février 2014 au National Museum of China. https://www.louvre.fr/routes/la-mediterranee-cartes-de-l-exposition, dernier accès 5 octobre 2018.

[7] Gilles Deleuze, Félix Guattari, *A Thousand Plateaus : Capitalism and Schizophrenia* [1980], University of Minnesota Press, Minneapolis 1987, p. 12.

[8] Franco Moretti, *Graphes, cartes et arbres : modèles abstraits pour une autre histoire de la littérature*, Prairies ordinaires, Paris 2008, p. 139.

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Comment le format « webdocumentaire » permet-il de penser le projet d'Encyclopédie numérique des techniques du cinéma ?[1]

Le partenariat international de recherche TECHNÈS vise à repenser le rôle de la technique dans l'histoire et l'esthétique du cinéma. Il s'est, pour cela, donné un projet fédérateur : la création d'une *Encyclopédie numérique des techniques du cinéma*. Celle-ci sera bilingue (français/anglais), évolutive[2] et en ligne. Cette dernière dimension ne manque pas de soulever des questions à l'heure où le cinéma lui-même devient, dans une large mesure numérique, tant dans son mode de production, de diffusion, que de conservation. Ce texte revient sur le processus de création de cette encyclopédie. Plus particulièrement, il rend compte de la manière dont les études portant sur format « webdocumentaire » peuvent servir à penser ce type de projet. Le rapprochement entre ces deux termes – encyclopédie et webdocumentaire – n'est cependant pas considéré comme étant quelque chose qui va de soi. Au contraire, cette mise en relation est questionnée. Cela nécessité de passer par une définition des termes concernés, puis par une réflexion d'ordre historiographique portant sur l'état de la recherche en études cinématographiques et médiatiques. Il en ressort une forme de convergence entre les recherches portant sur des plateformes d'édition numériques telles qu'une encyclopédie et un webdocumentaire. Cela mène à formuler l'hypothèse que l'*Encyclopédie numérique des techniques du cinéma* est, elle-même, un objet pour les chercheurs en études cinématographiques qui s'intéressent aux enjeux technologiques.

Pour débuter cette réflexion, il faut définir les domaines d'étude considérés. Le terme webdocumentaire correspond à un format adapté à une diffusion en ligne via différents types d'écran (ordinateur, tablette, téléphone intelligent), par distinction du film documentaire qui est, lui, pensé pour une projection en salle ou une retransmission télévisée. Samuel Ganthier propose une définition plus positive. Il s'agit d'un « format éditorial hybride [qui] propose un récit interactif dans un *storytelling* que le lecteur oriente et dont la scénarisation fragmente la lecture ».[3] Ses formes s'inscrivent aussi bien dans le domaine du marketing que du Net.art, ou encore du journalisme, de la communication institutionnelle, de la valorisation du patrimoine, du documentaire de création et de la médiation scientifique. Ainsi, ce sont tout autant des multinationales, des institutions académiques, des journaux, des chaînes de télévision, des collectivités territoriales, que des réalisateurs et des artistes qui sont impliqués dans la conception de webdocumentaires.[4] Cela revient à constater, comme le fait Sophie Beauparlant que « les identités du format sont multiples ».[5]

Pour autant, il est possible d'identifier quelques caractères communs au niveau formel. La plupart des webdocumentaires reposent sur une intrigue proposée par l'équipe du film. Il s'agit d'un critère discriminant vis-à-vis du format « site documentaire » qui se contente de présenter des collections.[6] Cette intrigue est portée par plusieurs types de supports médiatiques (images fixes ou animées, textes, sons, etc.) dont presque toujours des contenus audiovisuels réalisés pour l'occasion. Certains webdocumentaires intègrent des outils de visualisation tels qu'une frise chronologique ou une carte. De plus, ces contenus ne sont presque jamais présentés de manière continue comme c'est le cas dans un film. Ils peuvent être fragmentés en unités plus courtes, qui sont comparables au niveau de la séquence. Cette fragmentation va de pair avec le fait que l'intrigue est présentée de manière non-linéaire. Cette non-linéarité intègre une dimension d'affichage aléatoire et la possibilité de configurations potentiellement infinies.[7] Enfin, le rôle du spectateur est actif, dans la mesure où il est nécessaire qu'il interagisse avec l'interface pour que le webdocumentaire puisse être consulté. Ces actions peuvent aller du simple défilement dans une page web (*scroll down* en anglais) à des formes s'approchant du livre-jeu (*Gamebook* en anglais), voire du jeu vidéo. Cependant, il n'est pas question d'une véritable participation au sens d'un ajout de contenu à l'interface, car, sinon, l'accent est moins mis sur le changement de format que sur le changement de rapport au spectateur. Cela conduit à préférer l'expression de projet participatif, au terme de webdocumentaire.

Il est à présent nécessaire de définir le terme d'Encyclopédie, car si celui-ci a une histoire bien plus longue, il n'est pas, pour autant, l'objet d'un consensus. Le projet de Diderot et d'Alembert reposait sur la croyance propre aux Lumières d'un savoir qui serait maitrisable et organiquement constitué. Cette vocation totalisante de l'Encyclopédie n'est plus quelque d'envisageable aujourd'hui. Comme l'a expliqué Benoît Melançon, lors d'une table ronde organisée par TECHNÈS autour de ce thème, « Évidemment aujourd'hui, plus personne ne pense que tout le savoir du monde est maitrisable […] Personne ne pense que l'on peut tout savoir et que l'on peut tout reconstruire à partir d'une seule source ».[8] Pourtant, il reste quelque chose de cet horizon d'attente dans des projets tels que Wikipédia et dans les définitions vernaculaires de l'Encyclopédie. Le projet mené par TECHNÈS ne s'inscrit pas directement dans cette filiation. Des choix forts en termes de problématisation des entrées et d'un refus d'aborder l'ensemble du domaine étudié ont été faits. Cela ne signifie pas que le partenariat renonce pour autant au projet encyclopédique. Cependant, les chercheurs en retiennent plus la dimension subversive. En effet, Diderot précisait dans une entrée consacrée à la notion d'Encyclopédie que leur projet visait à remettre en cause l'état des connaissances. Il écrivait « J'ai dit qu'il n'appartenait qu'à un siècle philosophe, de tenter une Encyclopédie […] Il faut tout examiner, tout remuer sans exception et sans ménagement […] Il faut fouler aux pieds toutes ces vieilles puérilités ; renverser les barrières que la raison n'aura point posées ; rendre aux Sciences et aux Arts une liberté qui leur est si précieuse ».[9] Il ne s'agissait ainsi pas seulement de proposer une synthèse des savoirs établis, mais aussi d'apporter un point de vue singulier sur un domaine clairement défini. C'est ici que le projet TECHNÈS rejoint l'ambition énoncée dans le *Dictionnaire raisonné des sciences, des arts et des métiers*. Comme l'a énoncé le directeur du partenariat, André Gaudreault, l'objectif est de repenser l'histoire et l'esthétique du cinéma à l'aune du rôle joué par la technique depuis la fin du 19e siècle jusqu'à aujourd'hui.[10] Le projet vise à donner une vision transversale de ces différentes perspectives centrées sur la technique (histoire de la technique, sociologie des usages des machines, renouvellement de l'esthétique par une prise en compte du rôle des appareils, etc.). Dès lors des principes organisateurs émergent. Il s'agit des notions de pratiques, d'appareils et de discours. La note d'intention envoyée par le comité scientifique du projet à chacun des chercheurs qui prennent la responsabilité d'une partie de l'encyclopédie, précise : « Le partenariat se donne pour but de repenser les techniques cinématographiques, d'une part en replaçant les appareils dans une histoire plus générale des pratiques, discours et formes cinématographiques, et d'autre part en réintégrant les techniques dans leur contexte culturel et social général ».[11] Ces dimensions complémentaires se retrouvent articulées dans l'ensemble des projets (colloques, publications, expositions, émissions de télévision, etc.) qui sont menés au sein de TECHNÈS. En soi, de telles considérations ne dictent donc pas l'adoption d'un format de présentation spécifique.

La question de départ reste donc entière : pourquoi faire voisiner les termes webdocumentaire et encyclopédie ? Une option pourrait, en effet, revenir à déclarer que ces deux objets appartiennent à des domaines clairement distincts. En effet, la révision de l'histoire et de l'esthétique du cinéma à l'aune des connaissances techniques relève du domaine des études cinématographiques. L'Encyclopédie peut, elle, être considérée comme étant un projet éditorial qui doit donner à ces connaissances un débouché qui permette aux savoirs en études cinématographiques d'atteindre un public relativement large. Ce projet peut être considéré comme un objet d'étude, mais qui relève alors plus du domaine des études littéraires à l'ère du numérique ou des humanités numériques.

Cependant, un tel constat repose sur un impensé qui est, en lui-même, problématique. En effet, c'est avec le devenir numérique du cinéma que les chercheurs en études cinématographiques se sont intéressés à la technique. Il y avait, évidemment, des travaux pionniers auparavant, mais l'urgence ressentie à créer un partenariat international pour aborder le rôle de la technique est bien liée au fait que les frontières du cinéma se redéfinissent. Aujourd'hui, le cinéma, aussi bien dans ses modes de production, de diffusion, que de conservation est devenu, dans une large mesure, numérique. Le domaine considéré n'est plus celui de la sacro-sainte projection payante d'un film en pellicule sur un écran dans une salle. Il n'est pour s'en convaincre qu'à consulter le programme du dernier colloque doctoral du GRAFICS (Université de Montréal, 2016).[12] Lors de celui-ci près de la moitié des communications ont porté sur des plateformes de visionnement en ligne, l'esthétique des clips vidéo, la réception des séries télévisées, la diffusion des images tournées avec des Go Pro, la réalité virtuelle, les usages des selfies, etc. soit sur des sujets qui rendent compte d'une évolution de la discipline. Celles-ci abordent, en effet, des objets qui sont proches des études médiatiques et des humanités numériques. Ce type de questionnement n'est pas si nouveau que cela. En effet, à l'Université de Montréal, la notion d'intermédialité sert, depuis vingt ans déjà, à rapprocher les pratiques cinématographiques des autres pratiques artistiques et médiatiques. Cette réflexion est également menée chez nos partenaires à l'Université de Lausanne à partir de la notion de dispositif. Ainsi, comme l'écrivent Mireille Berton, Charlotte Bouchez et Susie Trenka, les objets à étudier « se présente[nt] à la fois comme une entité matérielle (machinique, technique), discursive (théorique, fantasmatique, conceptuelle) et sociale (interdisciplinaire, intermédiatique, culturelle ».[13] La narrativité intermédiale en particulier s'intéresse à la coprésence de différents supports médiatiques dans une même production culturelle. Il peut s'agir d'interpréter comment le théâtre intègre des images en mouvement ou le roman des images fixes. Dans le cas des interfaces web, c'est la question de l'hypermédialité, qui se retrouve placée au centre des interrogations. Cette notion revient à considérer le web comme un média capable d'intégrer en son sein divers autres médias. Jean-Marc Larrue explique qu' « un hypermédia est un média qui inclut d'autres médias dans son opération de médiation sans changer leur ontologie ».[14] Cette réflexion a également débouché sur l'élaboration du concept de médiativité, soit « une capacité propre de représenter – et de communiquer cette représentation – qu'un média donné possède par définition. Cette capacité est régie par les possibilités techniques de ce média, par les configurations sémiotiques internes qu'il sollicite et par les dispositifs communicationnels et relationnels qu'il est capable de mettre en place ».[15] Si on combine ces deux concepts des études intermédiales, il ressort qu'un aspect de la médiativité du web est d'être hypermédial. Cela conduit à percevoir la conception d'un site web comme une suite de choix entre différents supports médiatiques (images fixes ou animées, représentations 3D, document d'archives, texte rédigé par un chercheur, etc.) et différents agencements possibles entre ces derniers. Ce type de questionnement est tout autant valable que l'on conçoive une Encyclopédie ou un webdocumentaire.

Dès lors que l'on reconnait cette transformation profonde de la discipline « études cinématographiques », alors il devient de plus en plus difficile de s'en tenir à la posture disjonctive énoncée précédemment. Au contraire, il s'agit d'identifier qu'une partie de l'enjeu du projet consiste à penser l'Encyclopédie à l'ère du numérique comme un objet qui relève du domaine des études cinématographiques. Pour le dire autrement, ce projet qui porte sur l'histoire et l'esthétique des techniques se doit de problématiser le rapport qu'il entretient à son propre mode de médiation. Le projet se doit d'être en prise avec les enjeux actuels du domaine et non uniquement à revenir sur les pratiques, appareils et discours du passé. Il est donc possible de formuler l'hypothèse que les travaux menés sur le webdocumentaire comme un ensemble de ressources à même d'éclairer les enjeux de la conception de l'Encyclopédie TECHNÈS.

Ce qui dans l'Encyclopédie peut être comparé à un webdocumentaire se situe à l'échelle du parcours. Ce terme a été défini par le comité scientifique du projet. Il correspond au fait d'aborder un sujet circonscrit en adoptant une problématique clairement assumée par un petit groupe de chercheurs. Cela correspond à la dimension narrative du projet qui ne se limite pas à la mise en ligne d'une base de données documentaire. Concrètement, un parcours est un agencement d'une pluralité de supports médiatiques, soit de textes (pas plus de 9000 mots au total), de documents d'archives numérisés, d'entretiens filmés pour l'occasion, de démonstrations du fonctionnement d'appareils, de représentations 3D, d'extraits de films. Ces contenus sont le plus souvent fragmentés et organisés de manière non linéaire. L'ensemble de ces éléments qui composent le parcours sont indexés dans une base de données.

Il y a donc une articulation entre une volonté de créer une argumentation scientifique et d'exposer des documents dûment indexés. Comme l'explique Hart Cohen,

> *Database Documentary is a relatively new form of documentary storytelling that uses the combined elements of digital media and on-line platforms. Traditionally, the kind of documentary production linked to Database Documentary is built on a research practice in which access to an archive or other sources of knowledge and information is key. Archives are normally collections of texts, images, letters, and objects, usually in support of an individual's work or legacy or that of a social or public institution. Archival materials can be the core of a documentary production because they provide the evidence for an argument, the germination of a story and illustrations for possible links within the subject of a film.*[16]

L'étude de ce type de liens appartient donc au domaine des *Database narrative* qui fait l'objet de débats nourris depuis maintenant une vingtaine d'années[17] et qui sera l'objet d'un parcours réflexif dirigé par William Uricchio. Loin de vouloir opposer ces deux principes[18] – narration et base de données – il s'agit de trouver des manières de les articuler[19] en repensant les notions de narration[20] et de forme documentaire.[21] Il est important de rappeler ici, comme le fait Renée Bourassa, dans un texte consacré à *Fiction, récit et encyclopédie*, qu'un tel type de forme médiatique « exige tout de même un principe configurant afin d'éviter que la navigation ne devienne pure dérive ou errance aveugle. Il faut quelque chose de plus qu'une simple déambulation aléatoire pour assurer la force et la cohésion du récit dans un environnement hypermédiatique : celui-ci exige plutôt un contrôle minutieux par l'auteur des parcours potentiels de l'interacteur […] ».[22]

La conception des parcours gagne à s'inspirer des réflexions menées sur le caractère hypermédial des webdocumentaires. Cela revient à distinguer le format conçu pour le web d'une entrée d'encyclopédie publiée sur un support papier. Ce type d'entrée pouvait uniquement être composé de textes et d'images fixes. Dans la page d'une encyclopédie numérique, il est, par contre, possible d'organiser la coprésence d'éléments issus de différents médias. Ainsi, une démonstration d'abord menée par l'écrit peut ensuite prendre la forme d'une vidéo, d'une frise chronologique, d'une représentation 3D. Il n'est ici qu'à penser aux laborieuses descriptions techniques qui ne manquent pas d'émailler un texte portant sur telle ou telle machinerie. Celles-ci peuvent être remplacées ou plus justement articulées, avec une démonstration filmée portant sur le fonctionnement de l'appareil en question. La partie du parcours *Cinéma direct* (dirigé par Caroline Zéau) qui porte sur le film *Méthode 1* (1963) de Mario Ruspoli peut être prise comme exemple. Dans ce cadre, si l'on veut montrer que la nécessité de relier l'enregistreur sonore et la caméra par un fil est une contrainte, le meilleur moyen est certainement d'intégrer en série des photogrammes issus du film. Si l'on veut faire ressortir que la caméra n'est pas totalement autosilencieuse, le mieux est de faire entendre un extrait de la bande-son du film, sans forcément conserver l'image. Si, par contre, ce sont les mouvements des opérateurs qui sont au centre de l'analyse, alors un extrait du film est certainement utile. Il n'y a là aucune règle, mais un fonctionnement par essais-erreurs.[23]

Cela signifie que les parcours de l'Encyclopédie TECHNÈS ne sont pas des textes illustrés par des images, mais des objets médiatiques complexes, comme peut l'être un webdocumentaire.

La prise en compte d'un tel constat a conduit certains créateurs de webdocumentaires à proposer une forme d'inversion du rapport entre textes et sources documentaires. En effet, dans le cadre d'une entrée d'Encyclopédie papier, seul le texte du chercheur est donné à lire. Les sources documentaires sont, elles, présentées en note de bas de page ou en bibliographie de fin de texte. On dit que leur présence est discrète. Le web permet que la présentation d'une démonstration menée par l'écrit alterne avec la monstration des sources qui l'ont rendu possible. Plus encore l'animation, le commentaire oral, la mise en série des données peuvent constituer le corps de la démonstration elle-même. Je renvoie sur ce point au webdocumentaire *A Short History of the Highrise* (2013) créé pour le *New York Times* et l'ONF par Katerina Cizek. Le principe de base de ce projet repose sur la possibilité d'interrompre à tout moment la consultation de vidéos réalisées par l'équipe du film, pour en consulter les sources. L'usager de l'interface est littéralement invité à plonger dans les sources. Il peut ainsi voir les photographies qui sont montées dans les vidéos et consulter leur dos. Ces images sont donc présentées comme des archives. De plus, elles sont accompagnées de commentaires sonores.[24]

Par ailleurs, les représentations visuelles intégrées à une encyclopédie en ligne peuvent être considérées comme des modes de médiation des connaissances. Il ne s'agit pas d'images que l'on consulte imprimées sur une feuille de papier. Qu'il s'agisse d'une image fixe ou animée, d'un extrait de film ou d'une représentation en 3D, des annotations peuvent lui être assignées. Cela signifie qu'elle peut renvoyer à une autre image, à un texte, à une ressource externe. L'image est donc un objet médiatique complexe qui favorise la navigation dans les contenus de l'Encyclopédie. On retrouve ici la notion d'interactivité présente dans la définition du webdocumentaire.

Au-delà des images, les outils de visualisation sont nombreux. Il peut s'agir, entre autres, de frises chronologiques, de cartes géographiques, de cartes conceptuelles. Par exemple, la conception d'une frise chronologique est envisagée pour le parcours *Industrialisation du dessin animé aux États-Unis* (dirigé par Jean-Baptiste Massuet). Élisa Carfantan qui travaille sur ce sujet avec le responsable de parcours explique ainsi que « la bande [chronologique] reste placée en permanence en bas de l'écran durant le défilement du parcours. Elle resterait visible sur la totalité de ce dernier […]. Dans la mesure où la majeure partie de l'organisation du parcours sera chronologique, disposer d'une frise permanente pour garder des repères historiques est intéressant et stimulant quant à l'écriture que nous voulons proposer dans l'Encyclopédie ».[25] De nouveau, ces dispositifs, qui ont constitué des ressources essentielles au développement du format webdocumentaire, sont mobilisés dans le cadre de la conception des parcours de l'Encyclopédie. Ils peuvent aller jusqu'à constituer le moyen de navigation principal entre les différentes parties d'un parcours. Celui-ci revient alors à naviguer au sein d'une chronologie, d'un espace conceptuel ou géographique.

Enfin, chacun des textes et des contenus médiatiques intégrés dans les parcours est un document qui est rendu accessible accompagné d'informations structurées à l'aide du schéma de métadonnées générique Dublin Core qualifié.[26] De plus, les termes spécifiques à la technique du cinéma qui sont utilisés dans l'Encyclopédie sont reliés à un vocabulaire contrôlé qui permet de leur associer automatiquement des quasi-synonymes et des termes proches. Cela signifie qu'au-delà des modes de navigation qui sont conçus par le responsable du parcours, le fait que les données soient structurées mène à ce que l'usager puisse lui-même créer des liens à partir des contenus qui lui sont proposés et que l'Encyclopédie tend à être intégrée au web des données. De nouveau, on est ici au cœur de ce qui constitue la médiativité du web.

Au final, il s'avère donc que l'Encyclopédie n'est pas conçue comme un canal de diffusion d'une connaissance qui relèverait d'un autre domaine. L'Encyclopédie raisonnée des techniques du cinéma est, elle-même, un objet d'expérimentation pour les chercheurs en études cinématographiques. La redéfinition disciplinaire et la crise du média qui sont contemporaines de sa création ont conduit à une prise de conscience généralisée du rôle de la technique dans l'esthétique et l'histoire du cinéma. Cela constitue une chance assez unique de s'interroger sur la forme prise par les connaissances partagées dans ce domaine d'étude. Cette réflexion gagne à s'appuyer sur les cherches menées à propos du format « webdocumentaire ». C'est tout du moins l'hypothèse formulée dans le cadre de cet article. Il n'y a pas de doute que le format des parcours a aussi à voir avec la muséologie numérique (cf. article Emmanuel Château dans le cadre de ce dossier) et avec l'édition web. Dans tous les cas, ce type de perspective se traduit par une réflexion accrue portant sur la médiativité. Elle conduit à repenser les modalités de la coprésence entre textes et supports médiatiques, ainsi que le mode de navigation au sein des connaissances et enfin la structuration des données. En somme, ce sont la plupart les problématiques auxquelles la pratique cinématographique se trouve confrontée quand elle migre vers le web, qui se trouvent remobilisées dans le cadre de ce projet encyclopédique.

Notes

[1] Cette recherche a été menée dans le cadre des activités du Partenariat international de recherche TECHNÈS financé par le Conseil de recherches en sciences humaines du Canada.

[2] Cela signifie qu'à la différence d'une Encyclopédie imprimée dont la réédition est une opéra-

tion complexe, la révision des contenus scientifiques et l'ajout de documents d'archives seront possibles de manière continue.

[3] Samuel Gantier, « Le webdocumentaire. Un format hypermédia innovant pour scénariser le réel ? », dans *Journalisme en ligne*, De boeck, Bruxelles 2012, p. 161.

[4] Cette diversité se retrouve dans la base de données mise en place par le MIT pour recenser ce type de création, https://docubase.mit.edu/, dernier accès 31 décembre 2018.

[5] « Dieu n'a pas inventé le webdocumentaire », *Sens public*, 2017, http://sens-public.org/article1276.html?lang=fr, dernier accès 31 décembre 2018.

[6] La Cinémathèque française réalisait régulièrement de tels sites afin de valoriser ses collections lors de la mise en place d'une exposition. Par exemple, on peut consulter en ligne le site documentaire lié à S. M. Eisenstein (http://www.cinematheque.fr/sites-documentaires/eisenstein/index.php, dernier accès 31 décembre 2018), au Festival de Cannes (http://www.cinematheque.fr/sites-documentaires/cannes/rubrique/le-festival-au-fil-des-ans.php, dernier accès 31 décembre 2018) ou encore à la société Triangle (http://www.cinematheque.fr/sites-documentaires/triangle/index.php, dernier accès 31 décembre 2018).

[7] Comme l'explique Kristen Daly, « Database cinema forces the viewer to imagine that there could be other configurations », dans « Cinema 3.0: The Interactive-Image », *Cinema Journal*, vol. 50, n° 1, 2010, p. 90.

[8] Table ronde : « Le projet encyclopédique à l'époque du numérique », Université de Montréal, 6 avril 2017, https://www.youtube.com/watch?v=_AVUsqjtvZ4, dernier accès 31 décembre 2018.

[9] Entrée consultable sur le web dans *Encyclopédie de Diderot* en ligne : http://xn--encyclopdie-ibb.eu/index.php/science/1111734492-philosophie/1219172107-encyclopedie, dernier accès 31 décembre 2018.

[10] Présentation institutionnelle accessible sur le site du projet : http://technes.org/projet/, dernier accès 31 décembre 2018.

[11] Aa. Vv., *Cahier des charges à destination des responsables de parcours de l'Encyclopédie TECHNÈS*, texte non publié, 2017.

[12] *Cinéma et médias. Identités transitives*, 24-25 septembre 2016. Colloque codirigé par Santiago Hidalgo, Rémy Besson et Philippe Theophanidis.

[13] *La Circulation des images : cinéma, photographie et nouveaux médias*, Schüren Verlag, Marburg 2018, p. 7.

[14] Conférence donnée dans le cadre de l'École d'été du CRIalt, juin 2017. Lire également : Jean-Marc Larrue, « Du média à la médiation : les trente ans de la pensée intermédiale et la résistance théâtrale », dans *Les Archives de la mise en scène : hypermédialités du théâtre*, Presses universitaires du Septentrion, Villeneuve-d'Ascq 2014, pp. 29-56 et Chiel Kattenbelt, « Theatre as the Art of Performer and the Stage of Intermediality », dans Freda Chapple, Chiel Kattenbelt (sous la direction de), *Intermediality in Theatre and Performance*, Rodopi, Amsterdam-New York 2006, pp. 29-39.

[15] André Gaudreault, Philippe Marion, « Transécriture et médiatique narrative. L'enjeu de l'intermédialité », dans André Gaudreault, Thierry Groensteen (sous la direction de), *La Transécriture. Pour une théorie de l'adaptation*, Nota Bene/Centre national de la bande dessinée et de l'image, Québec-Angoulême 1998, p. 48.

[16] « Database Documentary From Authorship to Authoring in Remediated/Remixed Documentary », dans *Culture Unbound : Journal of Current Cultural Research*, vol. 4, n° 2, 2012, p. 328.

[17] À ce sujet, Ed Folsom expliquait, il y a déjà plus de dix ans, que « We are coming to recognize, then, gradually but inevitably, that database is a new genre, the genre of the twenty-first century. Its development may turn out to be the most significant effect computer culture will have on the literary world », « Database as Genre : The Epic Transformation of Archives », dans *PMLA*, vol. 122, n° 5, 2007, p. 1576.

[18] Cette tendance était présente dans les premiers textes de Lev Manovich, tel que « Database as Symbolic Form », dans *Convergence : The International Journal of Research into New Media Technologies*, vol. 5, n° 2, 1999, pp. 80-99 ou encore *The Language of New Media*, MIT Press, Boston 2001.

[19] Katherine N. Hayles note à ce propos, « Because database can construct relational juxtapositions but is helpless to interpret or explain them, it needs narrative to make its results meaningful. Narrative, for its part, needs database in the computationally intensive culture of the new millennium to enhance its cultural authority and test the generality of its insights »,

dans *How We Think : Digital Media and Contemporary Technogenesis*, University of Chicago Press, Chicago 2012, p. 176.

[20] Discutant les travaux menés par Manovich, Marsha Kinder invite à penser une définition plus large de la narration, comme « A means of patterning and interpreting the meaning of all sensory input and 'object of knowledge' », dans « Honoring the Past and Creating the Future in Hyperspace : New Technologies and Cultural Specificity », dans *The Contemporary Pacific*, vol. 15, n° 1, 2003, p. 97 et Stuart Dinmore insiste, « what new media objects can potentially represent is an era of post-linearity in narrative or perhaps a subtle shift in our understanding of what a narrative actually is », dans « The Real Online : Database Documentary in the Knowledge Space », dans *Journal of Media Practice*, vol. 15, n° 2, 2014, p. 126.

[21] Dale Hudson explique notamment, « new media disrupt the linear structures conventionally ascribed to documentary practices and prompt a rethinking of the concept of documentary », dans « Undisclosed Recipients : Database Documentaries and the Internet », dans *Studies in Documentary Film*, vol. 2, n° 1, 2008, pp. 89-98.

[22] Renée Bourassa, *Les Fictions hypermédiatiques : mondes fictionnels et espaces ludiques*, Le Quartenier, Montréal 2010, p. 63.

[23] Dans le cadre de ce parcours, cette réflexion est menée par la responsable du parcours, en dialogue avec une responsable de l'éditorialisation nommée Vanessa Nicolazic.

[24] Rémy Besson, « Archives visuelles et documentaire interactif : Vers un nouveau mode de médiation du passé ? », dans *Synoptique – An Online Journal of Film and Moving Image Studies*, vol. 4, n° 2, printemps 2015, pp. 86-104.

[25] Document de travail, décembre 2017. Copie en possession de l'auteur.

[26] Lire : http://dublincore.org/schemas/, dernier accès 31 décembre 2018. D'autres schémas sont également utilisés tels que : LIDO, Mpeg 7, Exif, EBUCore et schéma développé pour le projet pour indexer certaines caractéristiques des appareils cinématographiques.

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Modalités d'exposition du cinéma d'animation pour une Encyclopédie technique du cinéma en ligne : le cas de l'industrialisation du dessin animé dans les années 1910

La difficulté à penser une approche technique du cinéma d'animation dans un cadre encyclopédique repose sur la complexité même du terme « cinéma d'animation », imposant d'opérer des choix méthodologiques quant aux espaces de création étudiés. Ainsi, sans être totalement sourds aux questions d'ordre sociologique, institutionnel, théorique, ou encore économique que recouvre une telle notion, il convient en premier lieu de mettre en évidence le fait que le cinéma d'animation repose sur une diversité de techniques conditionnant sa pluridimensionnalité esthétique. L'identité stylistique de chaque production dépend en effet au moins tout autant de l'imaginaire d'un artiste que de la spécificité de chaque dispositif technique qui en détermine la réalisation. S'il existe bien sûr des techniques standardisées, comme celles ayant trait à la production industrielle de dessins animés, force est de constater l'inventivité technique qui sous-tend l'ensemble de la création animée, et dont il conviendrait sans doute, à terme, d'élaborer une forme de typologie.

C'est tout le défi représenté par le territoire « cinéma d'animation », que nous avons donc choisi de problématiser dans le cadre de l'Encyclopédie Raisonnée des Techniques du Cinéma TECHNÈS.[1] Ce projet encyclopédique, en cours de constitution à l'heure où nous écrivons ces lignes (et pensé pour être complété à l'horizon 2022) a pour ambition de réfléchir, au travers d'une série de « parcours », allant de la portabilité des appareils au cinéma expérimental en passant par des questions liées aux métiers du cinéma ou aux dispositifs immersifs, aux relations entre technique et esthétique tout au long de l'histoire du cinéma. Son enjeu est de s'adresser à la fois au grand public par le biais de son interface principale, afin de lui donner des informations clef concernant les grandes questions évoquées par les « parcours » ; mais également de fournir des documents et informations parfois inédites aux chercheurs spécialistes *via* une base de données qui complète les réflexions proposées par les auteurs de l'encyclopédie. Cette double-ambition passe bien sûr par une démarche vulgarisatrice – dans le sens noble du terme – visant à éclaircir et faire le point sur des questions parfois complexes, par des méthodes interactives pensées pour des usages occasionnels. Il s'agit en l'occurrence de se départir d'une logique réflexive traditionnelle où les parties se succéderaient en vue d'une démonstration, pour privilégier une approche plus « tabulaire », où les parties peuvent s'envisager de manière autonome, tout en se faisant écho les unes aux autres (liens hypertextes, etc.). Autrement dit ce projet ambitionne, tout en rendant accessible ce type de réflexions sur les techniques du cinéma au grand public, de penser autrement l'économie du discours scientifique, l'enjeu étant bien évidemment que cette démarche s'inscrive dans réflexion méthodologique plus large sur la manière d'envisager l'histoire de certains lieux d'élaborations techniques dans le domaine cinématographique.

La chose s'avère complexe dans le cas de l'animation, véritable territoire esthétique et institutionnel reposant, nous l'avons compris, sur une multitude d'approches techniques qui nécessitent d'être appréhendées de manière contextuelle pour ne pas tendre à une uniformisation du discours. Sans doute le lien que dessinent ces

productions les unes par rapport aux autres en termes techniques, s'articule autour d'une différence essentielle avec la captation en prises de vues réelles. Rappelons, en guise d'exemple, la définition de l'animation instituée par l'ASIFA (Association Internationale du Film d'Animation) en 1980, stipulant que « par art de l'animation, il faut entendre la création d'images animées par l'utilisation de toutes sortes de techniques à l'exception de la prise de vue directe ».[2] Envisager une « exposition virtuelle » des techniques du cinéma d'animation dans ce cadre encyclopédique repose donc sur un parti-pris méthodologique assez simple : jouer le jeu de la diversité des techniques afin de montrer l'écart qui peut séparer certaines productions industrielles de films plus « marginaux », au-delà de ce qui les relie *a priori*, à savoir leur appartenance commune à la sphère institutionnelle du cinéma d'animation. Pourtant, cet écart fondamental à la prise de vues réelles serait sans doute à questionner dans le cadre de certaines techniques d'animation, qui interrogent justement ce lien.
D'où la nécessité de réfléchir à des espaces techniques singuliers, lesquels ne pouvant être appréhendés que dans leur spécificité culturelle et historique, afin de questionner leur relation (souvent problématique) avec le cinéma dit traditionnel, en prises de vues réelles. À ce titre, l'idée d'aborder l'industrialisation du dessin animé dans les années 1910 aux États-Unis comme cas spécifique, et donc comme « parcours » à part entière, peut s'expliquer de plusieurs manières. D'ores et déjà, l'approche historique de plusieurs chercheurs s'intéressant à la question met en lumière une certaine tendance du dessin animé industriel à progressivement s'éloigner de ses origines liées à la presse illustrée pour aller vers une représentation perspectiviste héritée du cinéma en prises de vues réelles. Que ce soient les histoires du dessin animé de Leonard Maltin,[3] Donald Crafton,[4] Michael Barrier[5] ou encore Charles Solomon[6] pour n'en citer que quelques-unes, il convient de remarquer la structuration historique du discours s'articulant – de manière plus ou moins évidente – autour du modèle disneyen comme forme de raffinement graphique et technique des méthodes élaborées dans les premiers temps de la technique.[7] Or le modèle Disney se construit bien – la chose est désormais connue – à partir d'un paradigme esthétique que les vétérans du studio ont eux-mêmes choisi de nommer « l'imitation de la vie »,[8] c'est-à-dire concrètement d'une volonté d'imitation technique de la prise de vues réelles, dont il convient dès lors de comprendre les enjeux historiques.[9] Le dessin animé a d'ailleurs bien souvent été envisagé comme un entre-deux problématique dans le cadre des réflexions sur l'animation, répondant à la fois d'une inventivité formelle liée à ce mode d'expression graphique et s'inscrivant, dans le même mouvement, dans une logique représentationnelle héritée de la prise de vues réelles. Comme a pu l'exprimer Hervé Joubert-Laurencin :

> *le dessin proprement dit, et à proprement parler, n'est qu'un avatar dans le cartoon : il est nié par l'inbetweening et le timing – la mise en intervalles et en rythme – […] et la multiplication des mains qui tracent. En somme, l'incompatibilité esthétique du dessin d'art et du cartoon n'est que le pendant d'une parfaite compatibilité – au moins idéologique – entre cartoon et cinéma photographique. L'asservissement de la main, le laminage du style individuel, propres à Hollywood, ne sont rien d'autre qu'un retour à la machine régulée du cinématographe, une imitation du cinéma direct, plus radicale et plus invisible que la rotoscopie.*[10]

Mais il serait légitime de s'interroger sur le pourquoi et les modalités de cette imitation : s'agissait-il, dès les débuts de cette industrie, de s'inscrire dans le sillon idéologique de la représentation cinématographique en prises de vues réelles ? En réalité, ce que l'on constate, c'est que les procédures qui permettront la viabilité de cette industrie tendent effectivement à *faire écho* à certains principes techniques hérités du cinéma en prises de vues réelles. Cependant cette relation n'est au départ qu'incidente. Ce n'est que progressivement que cette gémellité de plus en plus constatée fera l'objet d'une réappropriation idéologique, notamment par des animateurs/producteurs comme Walt Disney, capitalisant sur une forme établie pour nourrir esthétiquement leurs productions et leur offrir aussi bien une légitimation culturelle qu'une place économiquement viable au sein de l'industrie du cinéma. Au départ, si la variété de dispositifs et de gestes mis en place par l'industrie du dessin animé débouche, presque incidemment, sur une imitation ou tout du moins une réappropriation du fonctionnement de caméras dites « traditionnelles », c'est tout simplement parce que la propriété fondamentale de ces dernières est bien sûr l'automatisme de la captation, que cherche à reconduire, par des biais humains, cette industrie naissante.

De fait, si les ouvrages précités constituent bien des références en la matière, force est de constater que leur approche repose sur une dimension souvent téléologique, résultant du paradigme d'histoire générale qu'ils choisissent d'adopter. Courant de studio en studio des années 1910 aux années 1940-50, ces travaux cherchent bien à interroger le modèle du dessin animé à la fois en termes de production, de réalisation et de réception, mais le brassage d'une période relativement large tend à mettre à jour une logique évolutionniste (voire progressiste) pour décrire les transformations historiques du dessin animé.[11] Le fait de ne se focaliser que sur la technique – sur une période plus réduite de surcroît – pourrait ainsi révéler une autre manière d'appréhender l'histoire des premières années du dessin animé se départissant d'un éventuel regard téléologique sur la période évoquée. À titre d'exemple, comment ne pas percevoir, dans les histoires du dessin animé que nous avons évoquées, un traitement de la technique reposant sur la mise en valeur « d'améliorations » reposant quasiment toujours sur la quantité de dessins produits. Citons par exemple Michael Barrier qui, après avoir évoqué la dimension « pauvrement animée » des dessins animés des années 1910, aborde le cas du cartooniste Gregory La Cava ayant tenté de mettre en place une « amélioration » de la production passant par une « augmentation du nombre de dessins, de 2000 à 3500 » introduisant ainsi une « animation plus naturelle ».[12]

Bien sûr, à partir de ce constat, se pose la question d'une méthode permettant d'exposer le double-aspect que nous évoquions plus tôt, notamment à l'aune d'une période pour laquelle la plupart des sources (matériel utilisé, documents de production, etc.) a été détruite ou perdue. Il s'agira donc ici de revenir sur les questions qui ont présidé à la mise en forme de ce parcours encyclopédique consacré au dessin animé industriel, pour comprendre de quelle manière l'appréhension historique de ses techniques ne peut être envisagée qu'au sein d'une démarche « expositionnelle », jouant sur un parcours fait de circonvolutions et de croisements auquel seul le regard de l'usager peut redonner sens par sa navigation.

Dans un premier temps, il s'agira de revenir sur les questions préalables qui ont nourri la réflexion autour d'un parcours encyclopédique consacré aux techniques du dessin animé, ces techniques étant en l'occurrence d'ordres différents, et posant dès lors non seulement la question de leur exposition, mais aussi celle de leur possible comparaison ; c'est ce qui nous amènera, par la suite, à montrer dans quelle mesure l'approche expositionnelle ici choisie a pu dépendre d'une réflexion sur les modalités mêmes du parcours de l'usager au sein d'un moment historique complexe, qui ne peut entièrement reposer sur une approche chronologique.

Exposer les gestes, exposer les procédures, exposer les appareils ?

Le premier défi d'un tel parcours repose sur la difficulté à trouver des sources qui permettraient de présenter le système selon lequel pouvaient s'organiser les premiers studios de dessin animé s'établissant à New York au début des années 1910. Outre les documents qui ont effectivement pu être préservés, comme par exemple des manuels[13] ou les revues dans lesquelles les producteurs ont pu décrire leurs éventuelles techniques,[14] les autres traces liées notamment au fonctionnement concret de ces studios (contrats, fiches de paie, artefacts techniques, etc.) s'avèrent extrêmement partielles, pour de multiples raisons (destructions de documents liées à la restructuration des studios, notamment).[15] C'est ce qui nous a amené à déplacer la question sous-tendant la mise en forme du parcours : si au début, l'idée était de répertorier les caméras utilisées dans les studios, la partialité des sources nous a malheureusement imposé d'abandonner l'idée, pour nous concentrer sur une autre approche : la manière dont la production de ces dessins animés permet de « simuler » le fonctionnement mécanique de la caméra traditionnelle, par des biais humains. Il est d'ailleurs intéressant de s'apercevoir que le procédé même de la caméra fonctionnant « image par image » ne fait pas l'objet, au début des années 1910, d'un quelconque brevet. Lorsque John Randolph Bray, l'un des trois grands représentants des studios de dessins animés de l'époque,[16] l'évoque en août 1914, il la décrit comme « une caméra ordinaire, même si, de préférence, je modifie la caméra en introduisant une réduction de vitesse des engrenages impliquant que pour chaque avancée et exposition du film, il y aura en comparaison un large mouvement de manivelle. Par exemple, le fonctionnement des engrenages sera pensé pour qu'une rotation complète de la manivelle soit nécessaire afin d'enregistrer chaque image ».[17] Cette imprécision fait sans doute écho aux problèmes juridiques liés à l'invention de ce dispositif : rappelons que le français Émile Cohl, travaillant de 1912 à 1913 pour la firme Éclair à New York, raconte dans les années 1920 la visite de deux industriels américains dans son studio, qu'il soupçonne à l'époque d'être venus pour l'espionner et récupérer son système de caméra, qu'il n'avait pas pris la peine de faire breveter.[18]

En d'autres termes, envisager une exposition des appareils dans le cadre d'un tel projet encyclopédique paraît constituer une impasse, découlant du fait qu'en réalité, les caméras permettant d'enregistrer les dessins image par image ne sont rien d'autre que des caméras traditionnelles (Cinématographe Lumière, caméra Bell & Howell 2709 – modèle n° 19, etc.).[19] La difficulté à envisager cette approche expositionnelle réside dans le fait qu'il n'y a pas « d'appareil de base » permettant d'animer les dessins, au sens où ce type de réalisation passe par une caméra traditionnelle, nullement modifiée dans son fonctionnement interne, mais dont on régule simplement la durée et la vitesse du tour de manivelle (répondant, au départ, à un facteur humain). Que peut-on exposer dans ce cas, que donner à voir ? Comment donner à entendre le fait que ce ne sont pas spécifiquement des appareils qui sont conçus pour reproduire esthétiquement la logique représentationnelle d'une caméra traditionnelle ? Mais que ce sont plutôt des procédures qui sont mises en jeu pour accélérer le rendement de la production – et qui s'incarnent dans des dispositifs tendant à imiter, effectivement (même si c'est en le décomposant), le fonctionnement de ces caméras traditionnelles ?

De fait, le problème est sensiblement le même lorsqu'il est abordé du point de vue des procédures ou même des gestes, la difficulté étant encore une fois la rareté des sources, notamment filmiques. Il n'existe pas de traces documentaires de la production de ce type de studio à l'époque,[20] sauf dans le cadre de documents promotionnels, tel que le film *How Animated Cartoons Are Made*, produit en 1919 par les studios Bray, et ne dévoilant en réalité que le travail – très idéalisé – d'un animateur, en occultant tout ce qui a trait à la dimension industrielle de ces produits culturels. Au-delà de la table de travail et du matériel de dessin, le « tour » des studios, l'exposition promise par le premier carton se contente en réalité de nous montrer la porte de M. Bray, à qui l'animateur William Carlson vient proposer une idée de scénario, se faisant jeter à la porte dans une forme de surenchère comique témoignant bien des enjeux d'un tel film, bien éloignés d'une quelconque velléité documentaire. Ce qu'il permet de deviner en revanche, à la faveur d'un cadre légèrement trop large, c'est la présence d'une assistante dont on ne verra malheureusement pas le travail – mais qui illustre néanmoins incidemment les descriptions des studios d'animation que l'on peut trouver dans les articles journalistiques de l'époque.[21]

On le comprend, exposer, ici, ne peut pas consister uniquement en une « monstration » du matériel, des méthodes, des caméras, etc., puisque seules quelques photographies ont pu subsister à travers le temps, n'offrant dès lors qu'une représentation partielle et parcellaire de l'industrie émergeant durant cette décennie. Les éléments photographiques ou audio-visuels doivent donc être appréhendés comme des traces ou des fragments se devant d'être complétés par d'autres documents, par exemple des schémas, des plans, ou même des dessins originaux réalisés par les artistes en vue de l'animation de leurs films. Il convient en ce sens de proposer des croisements. Par exemple, exposer une photographie de table de travail, et la mettre en parallèle avec un dessin réalisé par un artiste. Une telle comparaison peut permettre de mettre en valeur les repères visuels placés aux quatre coins de l'image en vue de la correspondance des dessins les uns par rapport aux autres, que l'on retrouve sur la table de travail. Il s'agit, ce faisant, de comprendre la logique de geste qui préside à la réalisation des dessins. L'exposition des techniques de cette période singulière ne peut donc s'envisager que selon une logique pointilliste, tirant parti de détails pour relier les informations entre elles afin de donner à l'usager de ce parcours virtuel une idée viable de ce à quoi pouvait ressembler un studio d'animation à l'époque. D'où la démarche méthodologique consistant à décomposer la production de ces films animés en appareils (la question de la caméra d'animation, le Rotoscope), en méthodes (la décomposition des dessins par phases-clefs, le cellulo), en gestes (l'usage de la règle à ergots) en dispositifs (le banc-titre), ou encore en métiers (le traceur, l'intervalliste), sans pour autant que ces diverses appréhensions techniques ne s'excluent totalement. Au contraire, il s'agit de comprendre qu'elles se complètent et qu'elles dépendent même les unes des autres. L'éclatement technique fait ici écho à la subdivision des tâches inhérente au modèle industriel dont se réclame notamment John Randolph Bray – ce n'est pas pour rien que ce dernier a pu être surnommé le « Henry Ford de l'animation ».[22] En effet, de cette subdivision naissent clairement des méthodes ouvrant sur des inventions ou des procédures particulières : la reproduction des dessins en vue de réduire le temps de production a par exemple favorisé l'utilisation de procédés d'impression – la zincographie notamment – mais a également occasionné la naissance de certains métiers (le traceur).

Exposer les débuts de l'industrialisation du dessin animé dans les années 1910, c'est donc réunir un certain nombre d'éléments, d'objets ou de gestes en apparence disparates pour, en les combinant, leur redonner un sens en vue de comprendre la logique qui préside aux techniques de cette époque. Cela renvoie par là-même à l'un des aspects définitionnels de l'exposition selon Etienne Souriau,[23] permettant justement de redessiner une logique (*l'*Œuvre) à partir d'éléments hétérogènes (*les* œuvres). De fait, réunir ainsi divers aspects de la création de dessins animés en studio, c'est aussi prendre conscience de ce qui relie ces aspects entre eux. En effet, tous s'avèrent relativement interdépendants, et reposent les uns sur les autres, ce qui pose question quant à la manière d'agencer ces composantes entre elles dans le cadre de la structure du parcours encyclopédique lui-même.

Un parcours d'exposition tabulaire

Il peut paraître compliqué de penser la logique d'un parcours d'exposition lorsque les éléments qu'il met à disposition de l'usager ne peuvent s'appréhender d'une manière chronologique. En effet, dans le cas qui nous occupe ici, il n'y a pas réellement de continuité dans l'apparition de techniques nouvelles qui laisserait imaginer une progression évolutive vers une forme supposément aboutie du dessin animé (les productions de Walt Disney, par exemple). Loin de toute dimension téléologique, l'industrie du dessin animé repose au contraire non seulement sur des expérimentations très disparates, mais également sur un mode de fonctionnement « entrelacé ». Par exemple, la standardisation de la technique de la règle à ergots dépend en partie d'une logique d'efficacité de rendement ayant occasionné la mise en place du métier de traceur. Mais celui-ci a pu dépendre en premier lieu de procédés voisins de la règle à ergots qui dépendaient, eux, de la démocratisation de procédés comme le banc-titre, etc. Il s'avère dès lors compliqué de déterminer quelle technique précède tel geste – et inversement – complexifiant la navigation au sein d'un parcours aux velléités expositionnelles que l'on ne peut appréhender comme un cheminement chronologique.

Pourtant, exposer les modalités techniques des débuts de l'industrie du dessin animé engage nécessairement une posture d'ordre historique, puisqu'il s'agit bien de comprendre la manière dont des méthodes ont pu être mises en place par certains producteurs, techniciens et dessinateurs, mais également récupérées par d'autres et éventuellement standardisées – lorsque d'autres, obsolètes, disparaissent presque sans laisser de traces. Partir des standards techniques pour en explorer les origines et les circonvolutions paraît ainsi la seule méthode valable pour appréhender cette histoire complexe, faite de croisements et de réappropriations. Il convient à ce titre d'en éviter la logique capitalistique biaisée, tendant à faire fi de tous les pas de côté effectués par l'industrie pendant près de dix ans. À titre d'exemple, Leonard Maltin n'hésite pas à évoquer la règle à tenons mise en place par Raoul Barré au mitan des années 1910 comme « l'étape majeure suivante »[24] de la standardisation industrielle des *cartoons*, après le cellulo de Earl Hurd,[25] mettant donc en jeu une dimension progressiste. Selon la définition du Petit Robert, le progrès serait en effet tout à la fois « un changement en mieux par lequel on s'approche d'un but, d'un résultat » et, plus précisément encore, « un *changement d'état* qui consiste en un *passage à un degré supérieur* ».[26] La question du progrès, inhérente à tout un pan de l'histoire des techniques,[27] se constitue en effet à l'aune de la notion d'étape, ce que révèle par exemple la célèbre *Histoire des techniques* de Pierre Rousseau, datant de 1956 et stipulant qu' « à *chaque progrès* de l'homme sur la route de l'intelligence correspond *une étape* de la technique ».[28] Maurice Daumas a d'ailleurs pour sa part, dès 1969, réfuté le principe d'une histoire des techniques strictement événementielle pour favoriser « la recherche d'une logique interne de l'évolution technique ».[29] Chaque entrée d'un parcours consacré aux techniques industrielles du dessin animé doit donc permettre de naviguer à la fois entre les diverses inventions menant à telle ou telle pratique installée et reconduite de studio en studio, mais également, du coup, entre les studios eux-mêmes, comme autant d'espaces d'émergence de ces pratiques.

Sur ce point, la mise en forme d'un tel parcours doit mettre en jeu à la fois l'historicité des techniques, mais également leur lieu d'expérimentation et/ou de standardisation. Il s'agit de ne pas donner l'impression d'un mouvement historique continu et fluide, menant des premières expériences d'animation de dessins aux méthodes de production industrielles « partagées par tous », les dernières en date, *ergo* « les meilleures ». L'idée était alors pour ce faire d'envisager une approche plus « tabulaire » de l'histoire du dessin animé, permettant de naviguer en son sein de manière plus synchronique que diachronique. Cette méthode pourrait notamment trouver à s'incarner dans un document d'archive important, découvert à la Cinémathèque québécoise lors de nos recherches, et constitué par le critique André Martin en 1967 : « l'arbre généalogique de l'origine et l'âge d'or du dessin animé américain de 1906 à 1941 ».[30] Il n'est pas du tout anodin que cet arbre généalogique, permettant de se repérer dans les circonvolutions historiques d'un art complexe, ait justement été réalisé dans le cadre de la Rétrospective mondiale du cinéma d'animation qui s'est tenue à Montréal du 13 au 18 août 1967, l'une des premières grandes manifestations consacrées à l'animation[31] se présentant sous la forme d'une *exposition*.[32] Comme André Martin l'écrit, « au départ, ce schéma n'était qu'un outil de travail destiné aux membres du comité d'organisation de la Rétrospective Mondiale du Cinéma d'Animation », mais « l'édition de cet arbre généalogique témoigne de l'attention particulière que la Cinémathèque canadienne porte, depuis déjà plusieurs années au Cinéma d'Animation mondial et des intentions affirmées par son équipe dirigeante de poursuivre un travail de recherche et de conservation dans ce domaine particulier du cinéma ».[33] Le fait de partir de ce schéma comme matrice de navigation au sein du parcours s'avère dès lors être porteur de sens, puisqu'il consiste avant tout en une « boussole » et en une confection de « quelques cartes »[34] à partir desquelles il est possible de se frayer un chemin à travers cette « bouilloire » qu'est l'industrie du dessin animé décrite par Martin : « Tous les mouvements sont simultanés, les influences innombrables. Réalisateurs et animateurs sautent d'un studio à l'autre ».[35]

D'où le choix d'une approche que l'on pourrait encore une fois qualifier de « tabulaire ». L'arbre généalogique d'André Martin propose en effet, à la verticale, des lignes de vie chronologiques (témoignant de l'importance de tel nom, de tel studio, etc.) là où les lignes horizontales dévoilent les correspondances entre les studios (fig. 148) :

> *Ayant à représenter un développement organique rebelle à toute simplification linéaire, cet arbre généalogique doit être regardé comme une mosaïque regroupant des tâches de couleurs en configurations significatives, plutôt que comme un plan de métro. C'est ainsi qu'une lecture horizontale globale permet de regrouper aisément les centres de productions et constellations reliées par une conjoncture commune, un état unique de la technique, de la diffusion cinématographique des communications graphiques, ou même des liens de production ou de diffusion évidents.*[36]

L'idée était ainsi, en ouverture de chaque entrée du parcours, de partir d'une version « augmentée » de ce schéma, en se focalisant sur la décennie 1910, afin de pouvoir de naviguer d'une technique à l'autre de manière interactive en pointant le terme de son choix, déroulant dès lors pour l'usager l'entrée choisie (fig. 149).

Il s'agit en quelque sorte de « donner corps » à ce schéma en « l'ouvrant », c'est-à-dire en en faisant une porte d'entrée à cette exposition virtuelle que constitue l'encyclopédie Technès. De cette manière, l'usager peut naviguer de manière tabulaire et non chronologique, rendant compte plus pleinement de la spécificité de cette période : il ne s'agit pas, pour le redire, de concevoir des procédés se succédant les uns aux autres en vue d'une amélioration qui permettrait d'aboutir à une sorte d'équivalence esthétique entre dessin animé et cinéma en prises de vues réelles (imitation de ce que peut produire, en termes d'images, la caméra traditionnelle). Il s'agit bien d'élaborer des dispositifs divers et variés permettant de faciliter et d'accélérer la production de ces films animés. Ce n'est qu'une fois sélectionnés sous l'angle d'une vision téléologique qu'ils peuvent effectivement donner l'impression d'une évolution vers des formes de plus en plus proches du cinéma photographique. Le brevet du Rotoscope obtenu par Max Fleischer en 1917[37] en est un exemple probant : conférant aux dessins un mouvement issu d'une captation en prises de vues réelles, ce procédé ne se voit utilisé de manière commerciale qu'à la fin de la décennie, à l'occasion de la série *Out of the Inkwell* (débutant en 1919), ce qui pourrait donner à l'entendre comme une forme d'aboutissement technique du dessin animé. Or, une telle interprétation ne pourrait être faite si la technique était appréhendée, comme proposé ici, de manière plus tabulaire, puisque l'on remarquerait alors que ses premières expérimentations ont lieu dès les premières années d'émergence des studios d'animation à New York (le brevet est déposé en 1915, alors que le studio de William Randolph Hearst n'est pas encore né), preuve d'une démarche qui n'a rien d'évolutionniste pour son inventeur (fig. 150).

L'approche expositionnelle décrite ici s'inscrit donc, dans sa proposition formelle même, contre cette tendance historique, en proposant un autre mode d'appréhension de l'histoire du dessin animé. Au-delà de certains documents nouveaux qu'il s'agit de donner à voir et à appréhender au grand public comme aux chercheurs (documents techniques d'Émile Cohl, notamment), ce parcours encyclopédique a surtout pour ambition de donner à voir d'une autre manière des documents déjà connus. C'est davantage d'un point de vue historiographique que d'un point de vue purement historique que ce parcours cherche à apporter, humblement, une proposition d'approche interactive des débuts industriels du dessin animé. En navigant au sein de cette exposition virtuelle à sa guise, et selon sa propre logique ou à partir de ce qui l'intéresse précisément, l'usager peut dès lors appréhender plus pleinement ce qui relie la technique qui le questionne à d'autres procédés, d'autres métiers, dont il n'aurait sans cela peut-être pas perçu l'importance dans le cadre de la compréhension du dispositif qui l'intéressait au départ. Ce mode d'exposition permet donc de penser des liens plus clairs entre diverses techniques, dont on entend bien qu'ils ne peuvent s'envisager que dans un cadre historique précis, correspondant ici au moment qui précède la standardisation globale de ce type de production (*via* des producteurs comme Max Fleischer ou Walt Disney). Ainsi ce parcours, tout en déconstruisant d'éventuels présupposés sur les débuts de cette industrie, participe-t-il d'une interrogation plus globale sur les enjeux du cinéma d'animation spécifiques à telle ou telle époque. Mais il permet aussi d'éclairer l'influence de certains de ces enjeux sur les formes à venir au sein de ce domaine spécifique, qu'il s'agisse d'œuvres commerciales ou plus marginales, se réappropriant parfois ces techniques industrielles pour mieux les détourner à des fins artistiques.[38]

En guise de conclusion, rappelons que ce parcours consacré à l'industrialisation du dessin animé aux États-Unis n'est qu'un des parcours composant un territoire plus vaste qu'est celui du cinéma d'animation. La méthode d'exposition proposée ici serait à interroger dans le cadre d'autres formes d'animation produites dans d'autres contextes, répondant à des problématiques parfois bien différentes, comme c'est le cas – pour ne prendre qu'un exemple – des productions comme les films d'animation sur pellicule produits à l'ONF par des artistes comme Norman McLaren ou Pierre Hébert. Loin de répondre aux mêmes nécessités que l'animation industrielle, ces productions ouvrent dès lors sur d'autres appréhensions techniques qui nécessitent également d'être creusées en vue d'explorer le large spectre du cinéma d'animation. En ce sens, si ces deux approches extrêmement différentes dans leurs enjeux (économiques, esthétiques, théoriques, etc.) s'inscrivent au sein d'un même territoire « cinéma d'animation », c'est justement que ce dernier se définit simultanément – si on l'appréhende d'un point de vue technique et si l'on reprend les termes de la définition de l'ASIFA donnée en introduction[39] – de manière *inclusive* (reposant sur l'animation d'images par « toutes sortes de techniques ») et de manière *exclusive* (« à l'exception de la prise de vue directe »). Ce point commun débouche ainsi sur une multitude d'approches techniques possibles, dont le degré d'éloignement les unes par rapport aux autres détermine l'identité fluctuante d'une notion qui se réinvente à mesure que le cinéma se transforme techniquement. Ce territoire se donne ainsi sans doute pour objectif, à terme, de proposer une hypothèse quant à ce qui caractérise justement, en creux, cette fameuse « technique de la prise de vue directe », au moins aussi problématique, dont l'identité elle-même incertaine se voit malmenée et travaillée par ces divers pas de côté technologiques, définitionnels d'un cinéma pour sa part insaisissable.

Illustrations

148. Extrait de « l'arbre généalogique » d'André Martin, couvrant la période 1909-1918.
149. Exemple de navigation au sein de « l'arbre généalogique », mettant ici en lumière l'outil de la règle à ergots.
150. Evocation des premières expérimentations du futur Rotoscope de Max Fleischer dès 1914.

Notes

[1] Pour plus de précisions sur cette Encyclopédie, voir le texte introductif de ce panel publié dans les présents actes, ainsi que le texte de Rémy Besson, « Comment le format 'webdocumentaire' permet-il de penser le projet d'Encyclopédie numérique des techniques du cinéma ? » qui lui fait suite.

[2] Brochure *What is ASIFA ?*, article 7, éditions ASIFA. Bien sûr, cette définition n'est pas exclusive. Elle se devrait notamment d'être complétée par les ouvrages importants d'Alan Cholodenko (*The Illusion of Life – Essays on Animation*, Powers Publications, Sydney 1991), Paul Wells (*Understanding Animation*, Routledge, Londres-New York 1998), Hervé Joubert-Laurencin (*La Lettre volante – Quatre essais sur le cinéma d'animation*, Presses de la Sorbonne Nouvelle, coll. « L'œil vivant », Paris 1997) ou encore Georges Sifianos (*Esthétique du cinéma d'animation*, Éditions du Cerf/Éditions du Corlet, coll. « 7ème art », Paris 2012) qui ont chacun contribué à cette définition de l'animation sans pour autant (systématiquement) passer par une approche comparatiste avec la prise de vues réelles. Cependant leur approche est davantage théorique et esthétique que purement technique, d'où le choix de les laisser de côté, au moins temporairement, dans le cadre de la réflexion méthodologique qui nous occupe ici.

[3] Leonard Maltin, *Of Mice and Magic – A History of American Animated Cartoons*, New American Library/Plume Book, New York-London 1980.

[4] Donald Crafton, *Before Mickey – The Animated Film, 1898-1928* (première édition : 1982), The University of Chicago Press, Chicago-London 1993 ; Donald Crafton, *Shadow of a Mouse*, University of California Press, Berkeley-Los Angeles-London 2012.

[5] Michael Barrier, *Hollywood Cartoons – American Animation in its Golden Age*, Oxford University Press, New York 1999.

[6] Charles Solomon, *Les Pionniers du dessin animé américain*, Dreamland, Paris 1996.

[7] Avant évidemment leur remise en question par plusieurs studios de production comme la MGM, la Warner Bros. ou la UPA par la suite, que ces auteurs traitent bien sûr quasiment tous dans leurs travaux respectifs.

[8] Cf. notamment Frank Thomas, Ollie Johnston, *The Illusion of Life – Disney Animation*, Disney Editions, New York 1981.

[9] Sur ce point, voir Jean-Baptiste Massuet, *Le Dessin animé au pays du film – Quand l'animation graphique rencontre le cinéma en prises de vues réelles*, PUR, Rennes 2017.

[10] Hervé Joubert-Laurencin, « Le Joujou du riche », dans *Trafic*, n° 2, printemps 1992, p. 108.

[11] L'ouvrage de Donald Crafton fait exception, mais son choix de s'arrêter chronologiquement à Disney témoigne tout de même d'un positionnement singulier, marquant une rupture paradigmatique importante avec ce dernier, et sous-entendant dès lors l'existence d'une étape particulière lui correspondant dans le cadre de l'évolution du dessin animé.

[12] Michael Barrier, *Hollywood Cartoons – American Animation in its Golden Age*, cit., pp. 18-19. L'auteur cite pour étayer ses propos Nat Falk (*How To Make Animated Cartoons*, Foundation Books, New York 1941).

[13] Cf. par exemple Edwin G. Lutz, *Animated Cartoons, How They Are Made, Their Origin and Development*, Charles Scribner's Sons, New York 1926.

[14] Pour ne prendre qu'un exemple, voir John Randolph Bray, « Development of Animated Cartoons », dans *Moving Picture World*, vol. 33, n° 3, 21 juillet 1917, pp. 395-398.

[15] Informations prises *via* discussions personnelles avec Thomas Stathes, actuel détenteur, avec la Library of Congress, du fond d'archives de John Randolph Bray.

[16] Avec Raoul Barré et William Randolph Hearst, tous trois ayant établi un studio d'animation à New York entre 1914 et 1916.

[17] John Randolph Bray, « Process of and articles for producing moving pictures », US Patent n° 811.165, appliqué en janvier 1914 et breveté le 11 août 1914, p. 3.

[18] Cf René Jeanne, « L'Amérique découvre et adopte le dessin animé », dans *Le Petit Journal*, rubrique « Le Cinéma », 12 mai 1938, non paginé.

[19] Sur ce point, il est possible de se référer à certains documents rédigés par Émile Cohl visant à inventer une caméra fonctionnant image par image. Ces documents sont en possession de la famille de Cohl, et seront mis à disposition du grand public dans le cadre de l'Encyclopédie Technès. Un article écrit par nos soins est en cours de publication sur le sujet : « 'Animer au tour de manivelle', la caméra d'Émile Cohl au prisme de 'l'invention' du dessin animé », a paraître courant 2019.

[20] Le manuel de Lutz évoqué en note 9, date par exemple de 1926.

[21] « En plus des artistes, caméramans et assistants, une équipe de filles est employée pour réaliser le traçage, et elles sont à la charge de H.D. Bailry, l'un des bras droits de M. Bray ». John Randolph Bray, « Development of Animated Cartoons », cit., p. 397 (c'est moi qui traduit).

[22] Charles Solomon, *Les Pionniers du dessin animé américain*, cit., p. 52 (c'est moi qui traduit).

[23] « C'est aussi pour l'artiste un moyen de faire le point sur lui-même ; il prend une nouvelle conscience de ses œuvres à les voir réunies ainsi en grand nombre ». Etienne Souriau, *Vocabulaire d'esthétique*, Presses Universitaires de France, Paris 1990, p. 711.

[24] Leonard Maltin, *Of Mice and Magic – A History of American Animated Cartoons*, cit., p. 11.

[25] Earl Hurd, « Process of and Apparatus for Producing Moving Pictures », brevet n° 1.143.542 déposé le 19 décembre 1914 et breveté le 15 juin 1915.

[26] Définition du terme « Progrès » dans le *Petit Robert – Dictionnaire alphabétique et analogique de la langue française* [1977], Paris 1985*,* p. 1541 (c'est moi qui souligne).

[27] Citons, à titre d'exemple, celui de Pierre Ducassé, *Histoire des techniques* (1ère éd. : 1945), Presses Universitaires de France, coll. « Que sais-je ? », Paris 1961, dans lequel le terme de progrès apparaît régulièrement (pp. 56, 69, 78, 81, 99, 105, 122, etc.).

[28] Pierre Rousseau, *Histoire des techniques*, Librairie Arthème Fayard, coll. « Les grandes études historiques », Paris 1956, p. 8 (c'est moi qui souligne).

[29] Maurice Daumas, « L'histoire des techniques : son objet, ses limites, ses méthodes », dans *Revue d'histoire des sciences et de leurs applications*, vol. 22, n° 22-1, année 1969, p. 19.

[30] André Martin, « Arbre généalogique de l'origine et l'âge d'or du dessin animé américain de 1906 à 1941 », La Cinémathèque canadienne, Montréal 1967.

[31] Avec Annecy, dont le festival est apparu en 1960.

[32] Organisée à l'Université George Williams – aujourd'hui Concordia. Cf Marco de Blois, « Le Cocktail du siècle : Montréal, août 1967 », Cinémathèque québécoise, http://www.cinematheque.qc.ca/fr/le-cocktail-du-siecle-montreal-aout-1967, dernier accès 14 juillet 2018.

[33] André Martin, « Arbre généalogique de l'origine et l'âge d'or du dessin animé américain de 1906 à 1941 », cit., p. 8.

[34] *Idem*, p. 3.

[35] *Ibidem.*

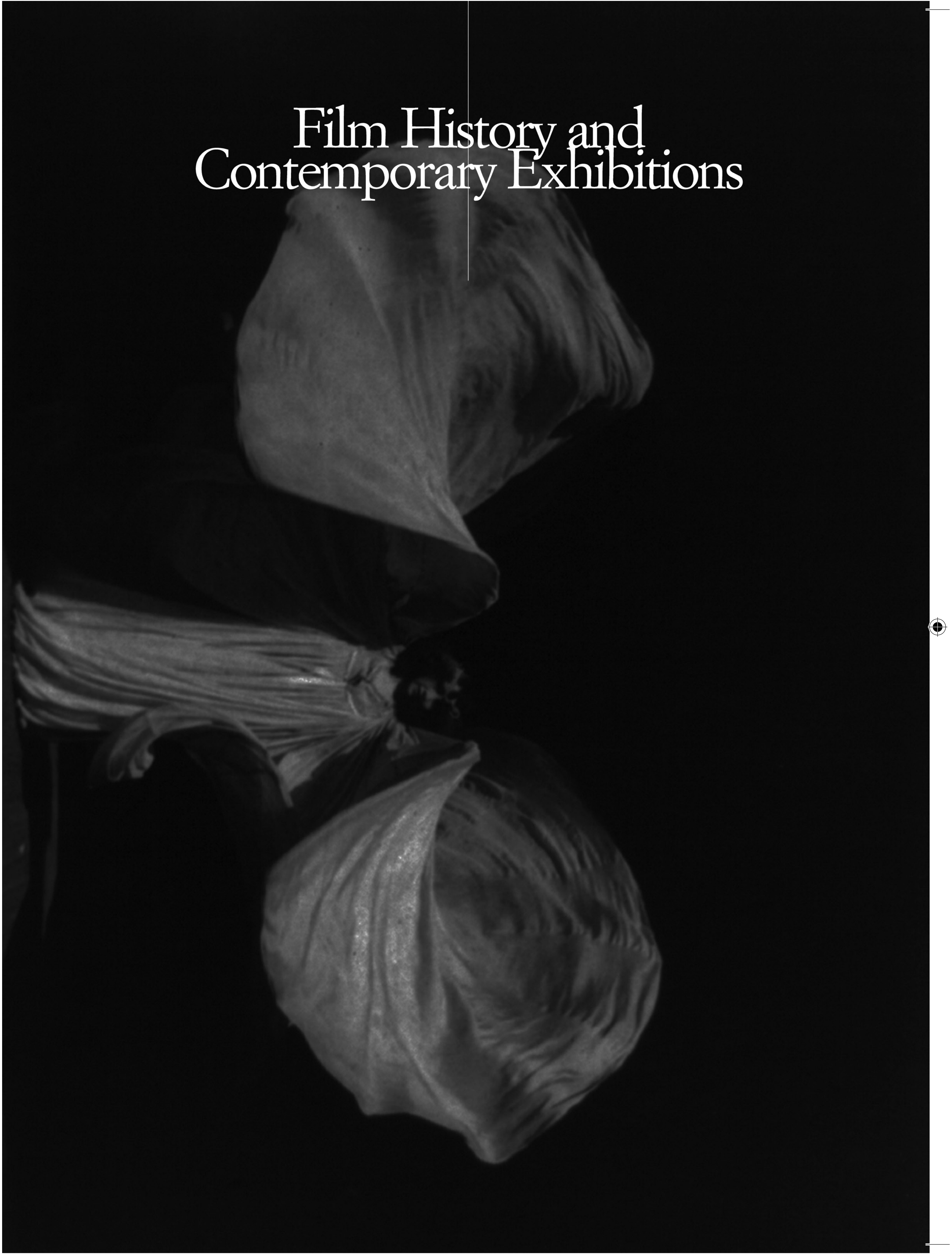
[36] *Idem*, p. 4.

[37] Max Fleischer, « Method of producing moving-picture cartoons », brevet US n° 1.242.674, déposé le 6 décembre 1915 et breveté le 9 octobre 1917.

[38] Pensons, pour ne prendre qu'un exemple, à l'utilisation de la caméra multiplane des studios Disney par Youri Norstein sur son film *Le Conte des contes* (1979).

[39] Brochure *What is ASIFA ?*, article 7, éditions ASIFA.

Film History and Contemporary Exhibitions



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Dreyer on Display: Film Director Exhibits and Historiographical Theory

In this paper, I will look at the problems of exhibiting a film director's work in a museum or a museum-type context. I am going to start out by discussing an exhibition where I worked as a co-curator, an exhibition juxtaposing the work of Dreyer with that of the Danish painter Vilhelm Hammershøi. One of the problems was that it was not as easy to show what a film director does as it is to display the work of a painter; the films themselves cannot be put on display the way paintings can. Even so, I would argue that it can still be useful to think in terms of what one art historian has termed the films' "facture," the way they can be evidence of their own making. This art-historical concept I think is very useful for film historians. It is also highly applicable when we consider the various artifacts left over from the production of a film, which are the kinds of things you usually end up putting on display when you try to create a museum-type exhibit about a film director. I am going to focus specifically on the models of the sets for *La Passion de Jeanne d'Arc* built by the film's set designer Hermann Warm.

The 2006/2007 exhibitions juxtaposing Dreyer and Hammershøi

The idea for an exhibition on Dreyer and Vilhelm Hammershøi was sparked by the 1997 exhibition of Hammershøi's paintings at the Musée d'Orsay in Paris, where a program of Dreyer's films was shown at the same time. The exhibition was eventually realized in 2006 as "Hammershøi > Dreyer: The Magic of Images" by a partnership of two institutions: the Danish art museum Ordrupgaard north of Copenhagen, where the exhibition was first shown (1 September 2006 - 7 January 2007), and the CCCB, the Centre for Contemporary Culture in Barcelona, where it was subsequently transferred (25 January - 1 May 2007). The original idea for the exhibition came from the director of expositions at CCCB, Jordi Balló, an art historian and film expert who had visited the Musée d'Orsay exhibition in 1997.

Hammershøi (1864-1916) has become the best-known Danish painter altogether. In 2017, one of his paintings sold at Sotheby's in New York for 6.2 million dollars.[1] He had been quite well known during his lifetime, fell out of favor until the 1980s, but is now more highly regarded than ever. He is best known for his many interiors, all painted in his own apartment, studying the fall of light from the windows and often showing a woman, usually turned away from the spectator. The paintings are deeply atmospheric and quietly mysterious.

Dreyer was very impressed by Hammershøi. For his first film, *Præsidenten*, "The President" or "The Chief Justice" from 1919, he designed the sets himself. It is easy to see that these sets bear a marked resemblance to Hammershøi paintings. In interviews, Dreyer has talked about how Hammershøi inspired him. Dreyer thought of rooms as a projection of character, and he wanted the calm, uncluttered interiors to give us a sense of the character of the film's protagonist. At the end of his career, Dreyer returned to Hammershøi. In *Gertrud* from 1964, the flashback of Gertrud visiting her composer-lover shows the influence particularly clearly. The way Dreyer drew inspiration from Hammershøi's pictures has been discussed by several Dreyer scholars (including myself).[2] Here, however, I want to concentrate on issues raised by trying to mount a museum exhibition juxtaposing the work of the painter and the filmmaker.

Putting Dreyer and Hammershøi together in an exhibition seemed like an obvious idea, but how to do it in practice was more challenging. How could one put the work of the film director together with the painter without the paintings stealing the show? The original paintings would be present in all their glory, whereas the films had to be represented by excerpts played on video monitors necessarily smaller than the cinema screen. The two exhibition venues adopted very different solutions to this problem.

Ordrupgaard is the former residence of Wilhelm Hansen, a wealthy private collector of Danish and French 19th century art, including several outstanding Hammershøi pictures. To Hansen's mansion, built 1916-18, a new wing designed by Zaha Hadid was added in 2005, and the exhibition took place in this new wing.

The Ordrupgaard exhibit was arranged thematically, with a section on figures, one on faces, one on interiors, one on exteriors, and one on light and lines. For each of these themes, Hammershøi paintings would be paired with selected excerpts from Dreyer's films. The exhibition architects Elina Moreau Braunstein and Jens Bertelsen of the firm Arkitekt Bertelsen came up with the concept of using semi-transparent tents to house the clips, allowing visitors to focus on the moving images without being taken out of the flow of the exhibit and to turn around and look at the paintings (fig. 151). The wooden jetties below the paintings not only contained descriptive texts but also functioned as display cases.

I wanted the exhibition to show how Dreyer worked with visual material – above all, of course, Hammershøi's paintings, but other kinds of material as well. A considerable amount of documentary material from Dreyer's personal archive was included to show this, and putting it in the display cases below the paintings tied the material to the thematic groupings. I also wanted to make sure that the films' standing as artworks in their own right was made clear, and I think the tents used in the Ordrupgaard exhibition design supported this goal very well.

The CCCB exhibition design was completely different. The CCCB is housed in an imposing early 19th century edifice, constructed as an almshouse. The exhibition was housed on one of the upper floors. An entirely enclosed exhibition space of narrow corridors and small rooms had been constructed here, designed by RCR architects (fig. 152). This gave the Spanish lighting designer Maurici Ginés full control of the illumination, allowing him to create lighting effects similar to those seen in Hammershøi's pictures, to impressive effect. "Light itself is information," the designers write in their description of the exhibition design. Throughout, "light acts as a conductor."[3]

The small rooms displayed the paintings to great advantage, but the thematic groupings were less apparent. Furthermore, the paintings were shown separately from the film excerpts and the documentary material. All the documentation was gathered together in a single room, the first room as you entered the exhibition. The excerpts were all in the next room you entered, so you would see all the Dreyer stuff before you reached the paintings. The excerpts were presented in a long, narrow, quite dark room. The video monitors would display a frozen frame until a spectator moved closer and stepped on a pedal in the floor, which would start the clip.

The Barcelona exhibit was very impressive with its fascinating attempt to capture the "soul" of both filmmaker and painter in its lighting design, but it arguable made it more difficult to discern how Dreyer had worked with pre-existing visual material to create the distinctive images of his films. The Barcelona exhibition, one could say, offered an interpretation; my goal had been to emphasize *facture* – how the films were made, rather than what they mean.

The concept of facture

Facture is a term proposed by the art historian David Summers. He writes: "'Facture' is the past participle of the Latin *facio*, *facere*, to make or to do; it thus has the same derivation as 'fact,' which might be defined as something evidently done."[4] In his great book *Real Spaces*, Summers argues that the field of art history has been too focused on interpretation, on inferring meaning; but art works, like all artifacts, are also tangible evidence that they were made and that someone made them.

Summers writes: "*to consider an artifact in terms of its facture is to consider it as a record of its own having been made*."[5] This may seem banal and self-evident, but Summers stresses that inferences from facture can actually tell us a great deal. He continues:

> *A Paleolithic spear point is the result of striking a stone of a certain kind, then working it in certain ways with certain tools. With experience we can see how this was done, much as we infer a foot from a footprint. In doing so, as this simple account implies, we also infer a maker and the more or less culturally specific actions of a maker in a situation in which those actions were meaningful.*[6]

A film is obviously a much more complex artifact than a Stone Age spear point, but we can still draw inferences of the same kind. Summers writes: "The appearance of modern works of art inevitably and significantly presupposes the vast networks of technology, industry, and commerce of the modern world."[7] Considered as a physical object, a film implies print an industrial machinery for manufacturing the raw film stock and processing the exposed negatives, complicated apparatuses for both shooting and projection, the standardization implied by the sprocket holes, and much else.

When we look at the pictures, we may learn even more. In *La Passion de Jeanne d'Arc*, we see hand-crafted props like the broom and dustpan used to sweep up Jeanne's cut hair, which look authentically medieval in their design. Again and again, we see elaborate and unusual camera movements. We see crowds of costumed extras, and large, carefully designed sets. All this implies a big production involving many highly skilled craftspeople in its making. We can use works of art as strong and direct sources for the study of their making.

David Summers has explicitly aligned his approach with that of another celebrated art historian, Michael Baxandall. Baxandall speaks of "inferential criticism," and Summers writes that "the principle of facture may be understood as Baxandall's 'inferential criticism set out in the most general terms.'"[8] Baxandall's inferential criticism emphasizes that art works can be studied as solutions to problems, specifically artistic problems. As film scholar Colin Burnett has written, it means that from the works, we can infer much about "the artist's will and agency (in terms of problem-stating and solving)."[9]

Baxandall describes the underlying conception thus:

> *… someone of a specific formation (class; metropolitan or provincial; schooling) has made an object (availability of materials, level of technique and intellection; format and subject-matter) in a situation (craft structure, market, institutions for exposure, forms of negotiation, initiative and control) where values (identity, beliefs, prized skills, manners, coterie loyalties) and a public's visual resources (symbolism and stylistic coding, vernacular visual skills) are mobilized to an end (problem conception and paradigm solution).*[10]

From this conception by Baxandall, we can formulate a series of historical questions: What backgrounds and skills did the filmmakers bring to their work? In what situation did they work? What professional values did they bring to their work? What viewing skills did they have and expect spectators to have? What problems were they trying to solve? Such questions, in my view, are central to any kind of film history focused on filmmakers and their works, including exhibitions about filmmakers. The juxtaposition of Hammershøi's paintings with particular excerpts from Dreyer's films was intended to give a sense of the overlap between their aesthetic values and the visual problems they were trying to solve.

Hermann Warm's models

We can direct the kind of questioning proposed by Baxandall not just at the films themselves but also at other, related artifacts, even if they ancillary objects and not really artworks in their own right. This is highly relevant for filmmaker exhibitions, since the works themselves are usually replaced by various kinds of artifacts that were part of the film's production, since an exhibition space is not and cannot really be a movie theater. The models of the sets of Dreyer's *La Passion de Jeanne d'Arc* (1928) preserved at the Danish Film Institute are a particularly interesting case.

There are four models in all, one of them in two parts, showing the large exterior set. The other three models are of the interiors: the chapel, where the first interrogation takes place; Jeanne's prison cell, where she is subsequently questioned; and the torture chamber (fig. 153). The interior set models are enclosed but have removable walls that can be slid out, allowing you to look into the sets from various directions. The level of detail is quite astonishing, and anyone susceptible to the fascination of scale models, dioramas or the like will easily be taken in by these models. But they raise a complicated question. When were they made? And for what end?

The models were made by Hermann Warm, the set designer for *La Passion de Jeanne d'Arc* and sold to the Danish film museum in 1964, but the Film Museum's acquisition ledger does not specify when the models were built. It seems unlikely that these brittle cardboard objects could have survived from the 1920s. It is more likely that Warm built them in the early 1960s. The Film Museum also has scale drawings of the sets, and the models correspond quite closely to these. It seems more plausible that Warm could have kept his drawings, but there is a possibility that these are also reconstructions.

If the models were originals, what would their purpose have been? *La Passion de Jeanne d'Arc* was a big and expensive production, and a lot of the money went into constructing the sets. The exterior set alone apparently cost one-and-a-half million francs. It might make sense to construct a scale model before actual building began to see if the sets would allow Dreyer to shoot the film the way he wanted it. The models would allow him to consider possible camera angles.

On the other hand, if the models were built as museum pieces, they are somewhat tricky to display. If one does not remove some of the wall pieces, one cannot really see inside the models of the interior sets; only the cardboard surface is visible. Unfortunately, we do not know what Dreyer said when he was invited to examine the models at the Danish Film Museum in 1965 (fig. 154). Dreyer is with the director of the Museum, Ib Monty, who died in 2016. The model they are discussing is that of the chapel set, where the first interrogation takes place.

A close examination of the models and the architectural drawings shows that neither of them correspond exactly to the finished sets. If we take the chapel set as an example, we can see in Warm's drawing (fig. 155) that the room has two exits; a small door near the altar, and the main double doors in the middle of the end wall opposite the altar. The double doors are similarly placed in the model, and they are visible in the film, where they are also located in the end wall. They have the same kind of iron studs that we see in the model. However, when the interrogation ends and Jeanne is led out, she does not exit through the double doors. In the film, we can see that she passes through a single side door, which appears to be to the right of the double doors, in the side wall next to the judges' bench. We can see the small door more clearly in a shot which appears only in the film's trailer (fig. 156); the soldiers to the left guard the double doors. This side door is not to be found in Warm's drawings. The model does not have a side door either. In the shot from the trailer in particular, the wall also looks considerably higher than it is in the drawing.

How are we to explain these discrepancies? It is possible that Warm has made mistakes because he drew up the plans from memory, but it seems more plausible that they are original preparatory plans that were changed before production actually commenced. The models are clearly based on the plans, though there are some differences there as well.

To what end, then, did Warm make the models? In the final analysis, I think the best explanation is the one offered by Teja Häuser in a blog post on Warm's 1960s sketches for *The Cabinet of Dr. Caligari*: that they are "reconstructions that would allow the genesis of the film to be resurrected for posterity."[11] Understanding that purpose is key to exhibiting these models well.

The concept of facture, then, can be used to ask questions of the individual objects we choose to put on display in an exhibition; but it can also be a way of thinking about an exhibition more broadly, particularly if we want it to give a sense of the working methods of particular filmmakers, of the resources they had and the problems they were trying to solve.

Illustrations

151. The exhibition at Ordrupgaard. (Courtesey of Ordrupgaard. Photograph by Tobias Toyberg).
152. The exhibition at CCCB, Barcelona. (Photograph by Artec3 [https://www.architonic.com/en/project/maurici-gines-hammershi-i-dreyer-exhibition/5101072]).
153. Hermann Warm's models for *La Passion de Jeanne d'Arc*: the exterior set (in two parts), the prison cell (in the middle), and the torture chamber (on the right). (Photograph by Thomas Christensen).
154. Dreyer examines the model of the chapel with Ib Monty, 1965. (DFI).
155. Hermann Warm's drawing of the chapel set. (DFI).
156. Frame enlargement from the trailer for *La Passion de Jeanne d'Arc* (Carl Th. Dreyer/ACE, 1928).

Notes

[1] Sarah P. Hanson, "Solid $269.7m at Sotheby's maintains momentum in Impressionist and Modern market," https://www.theartnewspaper.com/news/solid-dollar2697m-total-at-sothebys-maintains-momentum-in-impressionist-and-modern-market, last visit 4 July 2018.

[2] I.e., David Bordwell, *The Films of Carl-Theodor Dreyer*, University of California Press, Berkeley-Los Angeles 1981, pp. 42-43, 49, 172, 232 n11; Edvin Kau, *Dreyers filmkunst*, Akademisk forlag, Copenhagen 1989, pp. 17-18, 22-23, 358, 73-74; Maurice Drouzy, "Vilhelm Hammershøi et Carl Dreyer," in *Positif*, no. 445, 1998. For a full discussion, see Casper Tybjerg, "Reflected Interiors: The Films of Carl Th. Dreyer and Hammershøi's Example," in Annette Rosenvold Hvidt (ed.), *Hammershøi/Dreyer: The Magic of Images*, Ordrupgaard, Copenhagen 2006, pp. 27-42.

[3] "Maurici Gines - Hammershøi i Dreyer Exhibition," https://www.architonic.com/en/project/maurici-gines-hammershi-i-dreyer-exhibition/5101072, last visit 4 July 2018.

[4] David Summers, *Real Spaces: World Art History and the Rise of Western Modernism*, Phaidon, London 2003, p. 74.

[5] *Ibidem*. (Original emphasis).

[6] "The Subject in/of Art History: On the Histories of Artifacts," in *Art Bulletin*, vol. 76, no. 4, 1994, p. 592.

[7] *Ibidem*.

[8] David Summers, *Real Spaces: World Art History and the Rise of Western Modernism*, cit., p. 27.

[9] Colin Burnett, "The Art History of Michael Baxandall, Part 2: What Is Inferential Criticism of Art?," https://colinatthemovies.wordpress.com/2014/11/09/the-art-history-of-michael-baxandall-part-2-what-is-inferential-criticism-of-art/, last visit 4 July 2018.

[10] Michael Baxandall, review of *Peter Burke, Eyewitnessing*, in *English Historical Reivew*, vol. 117, no. 472, 2002, pp. 643-44.

[11] Teja Häuser, "'Eine so verrückte Sache (…) haben wir noch nie gemacht,'" https://filmeditio.hypotheses.org/301, last visit 4 July 2018.

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From Exhibition Cinema to *Addendum* Cinema: Pere Portabella's *El sopar* as a Spanish Case Study

Some of the most remarkable Spanish films of recent years have had their origins at different intersections between the spaces of the movie theatre, the museum, and the audience conceived of as a public participatory space. As a cultural institution, the museum is not only a place for audiovisual exhibition but also for film production, a relational space with the potential to make an active contribution to the development of new cinematic styles. Similarly, the role of university academics and critics has evolved from one of static, temporary commentators to dynamic promoters of cinematic knowledge with their own discursive and productive agency.

The cinema and the museum enhance one another without either one compromising the other's identity, in an experience that dissolves the boundary between spectator and film, and geographical boundaries as well, because a particularly notable aspect of exhibition cinema is its international orientation and circulation. The identity of the filmmaker is thus defined by virtue of his or her relationship with a broader network of filmmakers. Could it be that exhibition cinema – including works by Spanish filmmakers like Pere Portabella, José Luis Guerín, Víctor Erice, Albert Serra, Isaki Lacuesta, and their international contemporaries Apitchatpong Weerasethakul, Wang Bing, Naomi Kawase, Abbas Kiarostami, and many others – constitutes a secret plot for a new form of film distribution, a road map for a different kind of cinema with the potential to expand and complement existing film production and exhibition circuits?

Drawing on the notion of the "cultural symptom" formulated by Ernst Cassirer, the purpose of this paper is to explore the particular development of the work of one of these filmmakers, Pere Portabella, in the context of the establishment of exhibition cinema in contemporary Spanish filmmaking. Based on the phenomenological approach that has underpinned the three editions of the project *A History of Cinema Without Names*, the methodology of the research detailed here is founded on a desire to interrogate images, to explore the meaning conveyed in images produced by the intersection between the space of the movie theatre and the space of the museum in the Spanish case.

The museum and the movie theatre

The growing interest in filmmaking in museum contexts may have a number of explanations, but there is one that is probably the key factor: the fact that the cinema has a consolidated tradition in its connection with the spectator, an active and inclusive relationship that would obviously be of interest to the contemporary art system as well. It would be fair to say that in the context of the "global screen" theorised by Gilles Lipovetsky and Jean Serroy,[1] cinema has maintained its central role in image creation in the 21st century, although it may now be fulfilling that role by spreading out to other screens, influencing them all and, as Mary Ann Doane[2] and Laura Mulvey[3] have suggested, conditioning their temporality.

At the same time, the range of its forms is growing ever wider, largely due to the evolution of the technology, and to the debate over new forms of viewer consumption both inside and outside the movie theatre. This twofold transformation explains some of the shifts occurring in the work of some of Spain's most original filmmakers who have taken an interest in this creative intersection. The originality of the films made by directors like Albert Serra, Isaki Lacuesta, Víctor Erice, José Luís Guerín or Pere Portabella consists in the fact that although they are created as an interaction between cinema and institutions like the museum, they never lose their independent nature as films.

All of these filmmakers develop their works conceived for museum spaces without relinquishing the hypnotic nature and narrative form characteristic of the cinema. Most of their filmmaking practices are thus based on the principle that it is not the filmmakers who adapt to the context of the museum, but the museum or the exhibition institution that must adapt to, and be reinterpreted by, the cinema. We will be leaving aside the different traditional forms of audiovisual installations, and the concept of expanded cinema – so well defined by Youngblood[4] as the set of unknown heterotopias into which it is presumed that cinema is being transformed – to focus on the singular work of Pere Portabella, which is narrative in a traditional way and at the same time experimental. As a case study, the aim of the research outlined in this paper has been to establish the phenomenology of the field of tension existing between the cinema and the different active poles of the museum and the critic, and to identify the particular features of the contemporary Spanish context as exemplified by Portabella's work.

While elsewhere we have developed the notion of "exhibition cinema" applied to the contemporary Spanish cinema,[5] with this paper it is now our intention to propose a concept that broadens the idea of the relationship between the cinema and the museum. The concepts of augmented space and *temps exposé*, employed respectively by Lev Manovich (2008) and Dominique Païni[6] to define the museum as a space of expansion and display, could benefit by being complemented by concepts taken from art history and anthropology of the image. The concept that underpins this discussion and constitutes the key contribution of this paper is the addendum or "sedimentation cinema," as a consequence of an activation of a new information or context that enlighten the first editing of the film in a new historical moment.

Our hermeneutic point of departure is Aby Warburg's alternative approach to the historicity of images, and particularly his attention to the mechanisms of montage and his anthropological aspiration to formulate a history of gesture transmission in the West. As in his well-known Bilderatlas *Mnemosyne* (1924-1929),[7] Warburg used the juxtaposition of images to create a mobile thought process that draws out their historicity through the interference of the contexts of gestures in painting and sculpture. At the same time, the distance between images is a space of mediation (*Zwischenraum*)[8] and a *Denkraum*, an active thinking space to which it is possible to return at any moment, configuring a phantasmagorical idea of history always open to a new reformulation. As we will seek to demonstrate in this paper, Pere Portabella's film *El sopar* (*The Dinner*, 1974/2018) serves as an example of the idea of an open field of memory in the relationship between the images of history and the knowledge of the viewer.

Reception and political reactivation

In the relationship between the cinema and the museum, the role played by the work of Pere Portabella – a Spanish filmmaker whose work moved between the categories of militant and experimental cinema during the Franco era – is decisive for the originality of his films and their impact in the context of exhibition cinema, a space of freedom he conquered many years ago that has facilitated the wider distribution of his films. This was evident in the historic screening at the MoMa of *Vampir-Cuadecuc* (conceived in parallel with Jess Franco's film *Count Dracula* [1970], as a singular and atypical "making-of" documentary) in January 1972, a few days after the film was presented at the Cannes Film Festival.[9] Portabella's absence from the screening due to the cancellation of his passport by order of the Franco regime added a political dimension to the event, which established a close relationship, on the one hand, between his subsequent films and museum institutions and, on the other, between his films and their reception.

Since 2001, when the MACBA (Museu d'Art Contemporani de Barcelona) presented the retrospective titled *Plotless Stories: The Films of Pere Portabella*, the films that the Catalan filmmaker made during the Franco era (such as *No compteu amb els dits* [1967], *Nocturn 29* [1968], *Aidez l'Espagne* [1969] or *Advocats laboralistes* [1973]) has shifted in status from militant cinema to museum pieces. As has occurred with other films of the period that were produced practically in secret, museums and cultural centres have become spaces for the initiation of a process to reactivate the images that Portabella filmed to serve as testimony to a particular political and social situation resulting from Franco's dictatorship. Like other examples of "reactivated" political or militant cinema – like, for example, Esfir Shub's *The Fall of the Romanov Dynasty* (*Padenie dinastii Romanovykh*, 1927) and *The Great Road* (*Veliky put'*, 1927) –, these images exist in an anachronistic context that compels spectators to fit their present into the past in which the films are rooted.[10]

In this respect, *El sopar*, an exploration of the condition of the political prisoner through a conversation between five anti-Franco activists recently released from prison, constitutes a paradigmatic case for considering the question of the reception of Portabella's political films. Although it was shot on March 2nd, 1974, the day of the execution (fig. 157) of Salvador Puig Antich, the militant activist who was the last person to be executed by garrotting in Spain, the film contains no explicit reference to this event. And yet, this crucially significant coincidence has become a key factor in how the film has been interpreted over the years.

This fact inspired a preliminary investigation by the CINEMA Group at Universidad Pompeu Fabra into the critical reception of *El sopar*.[11] This research is outlined in this paper, which will offer a chronological account of both the unique "reactivation" process that *El sopar* has undergone over the years, and the evolution of its critical reception. To this end, we need to begin with the first public screenings of the film after the end of the Franco regime, which contextualised the film in its most militant dimension. On February 9th, 1976, when it was screened at the end of an event calling for the abolition of official control and censorship in Spanish cinema, the film was used as a tool for the fight against repression, firmly anchored in the political context of Spain's transition to democracy. Later, in January 1978, a retrospective of Portabella's work opened at the Filmoteca de Catalunya where *El sopar* was screened together with *Advocats laboralistes*, in one of the first public screenings of the film in a non-militant context.

From a theoretical perspective, it was during the period of the Spanish Transition (1975-1982) that the first efforts were made to recover and promote the work that Pere Portabella had made as an underground filmmaker during the Franco regime. However, during this time *El sopar* would remain in the background, the subject only of fragmentary studies due to the poor condition of the film reel, especially its soundtrack. This may partly explain why neither historiographers of Catalan cinema nor the first initiatives to define "marginal cinema"[12] gave much attention to *El sopar* in those years of the Transition, with only passing references like those of the historian Joaquim Romaguera, who in a compilation of Catalan cinema promoted by the Congrés de Cultura Catalana in 1977, mentions *El sopar* and offers the following synopsis: "Five political prisoners meet for dinner and talk about their situations, generational problems due to the years they spent in prison, their futures, etc."[13] This is a synopsis that could be defined as the canonical version right up until the year 2001.[14]

The film's lack of visibility went hand-in-hand with the absence of any reference to Puig Antich. In the interviews of Pere Portabella during the period of the Transition, such as those published in the film journals *Canigó*[15] and *Fotogramas* (1977), or the later interview published in *Nosferatu*,[16] the filmmaker makes no mention at all of the fact that *El sopar* was filmed on the very date of the militant anarchist's execution.[17] Nor is there any reference to this coincidence in his writings, in publications like *Arc Voltaic* (1981),[18] or in his public talks, for example at the *24ª Semana Internacional de Cine de Valladolid* (1979),[19] where a series of conversations were held about marginal cinema in Spain.

The result of all this is that in the bibliography of texts published in Spain over nearly 30 years (from 1974 to 2001) dealing either directly or incidentally with Portabella's work, *El sopar* is referenced only very rarely and briefly, generally with a short synopsis and never with any mention of the connection between the film and Puig Antich.[20] However, all this changed as a result of the MACBA retrospective, *Plotless Stories: The Films of Pere Portabella* (2001), due to two events of vital importance in the film's history: the recovery and restoration of its soundtrack, and the revelation at a press conference by Pere Portabella himself of the connection between the filming of *El sopar* and the execution of Puig Antich. As reported in a news story published in the daily newspaper *El País* on February 1st, 2001:

> *[Pere Portabella] filmography includes films that could be considered political documents, such as Informe general (1976) and the previously unreleased El sopar, a film shot in secret on the night of 3 March 1973 [sic], the same night that Salvador Puig Antich was executed, which could not be released at the time due to poor sound quality.*

A new context for El sopar*: the ghosts of the Spanish dictatorship*

In parallel with the recovery of *El sopar*, both in terms of public attention and its material condition (sound), something literally emerged that had been absent from both the film itself and the public understanding of it for nearly thirty years. The temporal perspective turned the clandestine meeting for the filming of *El sopar* and the murder of Puig Antich into an action-reaction binary that has marked the film's new trajectory.[21]

But the definitive consolidation in the public sphere of the association between *El sopar* and Puig Antich was without doubt the broadcasting on one of the Catalan public television channels of the episode of the historical series *Crònica d'una mirada* (Manuel Barrios, 2003) that focuses exclusively on Portabella's film.[22] In the episode, the director returns nearly thirty years later to the country house where the dinner filmed in *El sopar* originally took place and recounts the details of the filming, foregrounding the question of Puig Antich right from the outset. The broadcasting of *Crònica d'una mirada* and its subsequent distribution nationally (2004) and internationally (2010) on DVD was the trigger that identified the film in terms of its connection to Puig Antich.

The press kit for Pragda, the distributor of the series in the United States, summarises the episode on *El sopar* as follows: "The film was shot in 1974, the same day Salvador Puig Antich was executed."[23] *Crònica d'una mirada* confirms the transformation of what until then had been the canonical synopsis of the film. What in the contemporary moment of 1974 had been absent from the film ended up being inscribed in its discourse thirty years later in a very particular way: a latent and unavoidable space outside the frame that has turned into a necessary subtitle in any discussion, presentation or vindication of *El sopar*: "shot on the day of the death of Puig Antich."

At the same time, this transformation of the film's reception was reinforced when it was also established as the de facto discourse at international film festivals, cultural centres and museums, where *El sopar* is always presented and screened with its connection to Puig Antich foregrounded. Consider, for example, the first sentence in the synopses of *El sopar* that have appeared in different programs for these events in different languages. New York (2009 and 2011): "This film attempts to approach the problem of political prisoners in detention for long periods of time. This meeting took place in 1974 in Catalonia on the day of the execution of garrote [*sic*] Salvador Puig Antich, a militant anarchist"[24]; Toulouse (2015): "Cinq anciens prisonniers politiques se réunissent clandestinement un soir de 1974, le jour de l'exécution de Salvador Puig Antich"[25]; Milan (2015): "Un film che osserva una discussione tra un gruppo di ex prigionieri politici riguardo le loro esperienze in gattabuia, durante la notte prima [*sic*] dell'esecuzione dell'anarchico Catalano Salvador Puig Antich."[26]

This increasing international visibility of *El sopar* has reinforced new theoretical approaches to the film where the presence of Puig Antich outside the frame is unavoidable, as can be seen in articles by Jonathan Rosenbaum,[27] José Luis Sánchez Noriega[28] and Erika Balsom.[29] Steven Marsh, in his article "The Legacies of Pere Portabella: Between Heritage and Inheritance," explores the question of the presence/absence of Puig Antich in the film:

> *On one level, the participants in El sopar represent those who are absent (Puig Antich, the collective of political prisoners, and the voice of dissent); as individuals they represent their own differing political tendencies; they also represent sacrifice. Meanwhile, the film represents them as a group.*[30]

Marsh points to one of the first attempts to put the film's *mise-en-scène* in relation to the presence of Puig Antich outside the frame.[31]

Finally, the transformation and increased importance of *El sopar* on every level has translated into its (re-) appropiation through creative and activist endeavours with a militant focus. In this respect, the cycle titled *40 años no es nada. Reflejos y derivas del cine militante español contemporáneo* (2014) programmed a filmic dialogue between *El sopar* and Ramiro Ledo's *Vida extra* (2012), suggesting a temporal game of mirrors in which a young contemporary filmmaker establishes a direct dialogue in the present with the images of underground militant cinema of the 1970s. Once again, Portabella's film is presented in the context of the story of Puig Antich, and revitalised through the perspective of contemporary political cinema.[32]

The new militant character of *El sopar* is made especially clear in the controversy that arose when, in March 2015, the film's screening and presentation in Granada was prohibited by the representative of the conservative Party (*Partido Popular*) on the Provincial Council.[33] This ban turned *El sopar* into front page news and results in various expressions of solidarity, including its screening by La Comuna (an association of former prisoners under Franco) at the Cineteca de Madrid in June of the same year. Under the eloquent title "40 años de censura franquista + 40 postfranquista: Homenaje a *El sopar*" (40 Years of Francoist Censorship + 40 Years of Post-Francoist Censorship: Tribute to *El sopar*), this event sought to do justice to a film which, created in secret, has re-emerged in 21st century democratic Spain only to be subjected to the same mechanisms of repression that it originally denounced. The following was the synopsis written for the La Comuna event in Madrid, to which Portabella himself and Lola Ferreira, one of the former prisoners featured in the film, were invited:

> *Produced in the final years of Francoism, when the criminal repression was operating at full throttle, it was shot in a single evening, on the same night, for greater symbolism and intent, as the eve of the murder by garrotte of Salvador Puig Antich.*[34]

It is worth noting how, in their appropriation of the film, contemporary protest movements have reinforced this connection, viewing it as an essential linkage to their proposal of militant opposition. Some opinion columnists have also reflected on the scope of the ban on the film, in relation to the endurance and continued validity of its message. Among these, the philosopher Xavier Antich wrote on this question in his column for *La Vanguardia* on April 1st, 2015:

> *Portabella's film, obviously banned under Franco, seems to continue ruffling feathers forty years later […]. In El sopar can be heard the social importance of the people when it is remembered, when the prisoners are locked up, that "the street is what guarantees victory."*[35]

This process of "reactivation" of *El sopar* is evidence of the change that the film has undergone in terms of its public reception. In the years of the Transition, the film was viewed as a rough draft, a work-in-progress leading to what would be a major endeavour of debate and reflection: *Informe general* (1976). Now in the 21st century, the film has become recognised in its own right and claimed by the people's movements that emerged after the 15-M movement, which are, in turn, featured in another of Portabella's films, *Informe General II. El rapto de Europa* (*General Report II: The New Abduction of Europe*, 2016).

A new film born years later

In response to this research into the reception of *El sopar* and its anachronistic interpretation with the passage of time, Pere Portabella decided to take a creative step. Convinced that the coincidental relationship between the shooting of the film and the death of Puig Antich has become a public fact seized on by civic activists and historiographers, in 2017 he decided to recover some footage (around ten minutes' duration) he had taken in 1974, the same year in which *El sopar* was made: footage that refers directly to the death of Puig Antich, also filmed in secret and unreleased until now.

These images were filmed in the office of Puig Antich's lawyer, Oriol Arau, to document the memory of the militant anarchist and the process that led to his execution. This footage, on black and white 16mm film, represents an example of Portabella's indirect style. Instead of limiting himself to the lawyer's description of the events that occurred during the defence of the accused, Portabella agrees with Oriol Arau to refer to the "client file," i.e., to everything recorded in the law firm's documentation related to the different actions taken in his defence. The activist is thus a client, and this paradox makes for an even more radical and distanced reading of all these steps, recorded succinctly and without any apparent emotion, almost like a notarial record, culminating brutally with the lawyer's presence at the execution, the burial and the clandestine funeral.

Portabella feels that these images are an echo of *El sopar*, because they document the event that hovers over the film but is not actually in it. What is interesting is that Portabella has decided to incorporate the footage into a new edit, which leaves the original film the same but offers his own reflection on the reception of *El sopar* and the role that the shadow of Puig Antich has played in it. In other words, the footage of Arau in his office will become part of a new film in which this recovered footage (that in his origins doesn't belong to *El sopar*) will function as a continuation, as a commentary on the original film: as an addendum.

In this new version of *El sopar*, Portabella leaves the original film intact, respecting the final fade-to-black after the silence that meets the last words of one of the protagonists, in an atmosphere of considerable dramatic force. After this fade, a caption appears that reads "30 years later," followed by footage from the episode of *Crònica d'una mirada*, the Catalan public television program that triggered public awareness of the connection between the film and Puig Antich's execution. The sequence begins with Portabella's voice in a car that is driving him to the country house in Vallés:

> *But what we unfortunately did not foresee is that the day we had left to come here was the very day that they were to enforce Puig Antich's sentence of death by garrotting in the Modelo prison in Barcelona. There were a lot of demonstrations against this and the police were on the alert. Next year it will be 30 years; this was in '74 (our English translation of Spanish version provided by Pere Portabella's producer,* Films 59*).*

This footage of the filmmaker's testimony functions as a link, as an introduction to Portabella's previously unreleased film. After this comes the footage shot in Orial Arau's office in November 1974, edited for the first time to form part of this new film. The opening sequence of this new version shows a legal intern at the firm (Juan José Pérez) taking a dossier out of the office files and bringing it to Arau, who is sitting at his work desk (figg. 158-159). From the dossier he takes out a file:

> *Oriol Arau: So this is a file that we call an "economic file"... One moment, number 68. All right, these are some files that we have for internal organisation, which show us all the steps we took with the client and issues handled for him. In other words, court visits, briefs, prison visits, interviews, etc. Of course, in this file we sum up completely, beyond the economic question, day by day, everything that is done in relation to other matters. Then, once it's over, we cancel the file, file it away, and so on.*
> *Could you read it, Juan José, please?*

The camera takes a close-up of Juan José Pérez, who reads this "economic file," starting with the actions carried out by the defence in 1974, in the weeks immediately prior to Puig Antich's execution:

> *Juan José Pérez: We go onto the year 1974, where we start with:*
> *8 January: With a visit to the prison by the lawyer Mr. Condomines.*
> *9 January: Visit to the Military Government offices.*
> *10 February: Visit to the prison, interview with the prison governor.*
> *11 February: Attended hearing at the Supreme Council of Military Justice.*

> *12 February: Visit to the Supreme Council of Justice, interview with the lawyer García Trevijano.*
> *1 March: Communication from the Military Government of the acknowledgement of the Government at its meeting of the decision-making council of ministers. Visit to the prison and communication of the sentence to Salvador. All night in the prison. 3 visits to the Law Society.*
> *2 March: At 9:40 a.m., execution of the sentence. Death of Salvador. Visit to cemetery. Information at the Law Society.*
> *3 March: Attendance at burial prohibited.*
> *7 March: Attendance at funeral services.*
> *8 March: The matter is deemed closed and the records are filed.*

The last shot lingers on Juan José Pérez's face as he looks at the camera in a long silence that corresponds visually with the final shot in *El sopar*. A similar weight, and a similar evocation of the dense atmosphere, with the cigarette smoke also present, charging the scene with iconic meaning (figg. 160-161).

What is this film? It is not merely a new version of *El sopar*, but a recreation of a filmic experience that incorporates a character who was present without being there. This new film does not nullify the existence of *El sopar* as a film belonging entirely to 1974, but it functions as an addendum, an annotation or commentary that interprets, (re)contextualises and completes the original text. When Arau and Portabella decided that it would be the client's economic file that would be used to chronicle Puig Antich's death, they made a highly significant gesture that confirms the effectiveness of this dramatic technique. The dry, bureaucratic language effectively pushes the emotional dimension outside the frame, although it continues to be present in the film by virtue of its resonance in the spectator's conscience. Moreover, this addendum responds to what Rubén Hernández defines as a "sedimentation narrative"[36] when referring to the successive layers that reverberate in Portabella's films. Once again in his work, the indirect *mise-en-scène* exhibits an exemplary consistency.

This recovery of the piece on Oriol Arau talking about Puig Antich could have been used for a short documentary with a life of its own. In itself, this footage of Arau and his office constitutes a great testimony as a document, because it could be considered to be one of very few pieces of film footage in existence on the trial and death of Puig Antich, shot in secret during the Franco regime.[37] But Portabella's decision to give it a new life not as a separate film but as an echo to *El sopar*, with a relationship to that film like that of a musical composition, gives the whole story from 1974 a new dimension. This previously unreleased, recovered footage speaks to us about the injustice of a murder legalised by Francoism. But by presenting it almost like a business chronicle, with emotion underlying the distanced narration of the events, he offers us another way of approaching the phenomenon of dissidence that completes the testimony of the other prisoners.

This film and its addendum created in 2018 thus constitutes a new mode of "exhibition cinema": the return to the "thinking space" or *Denkraum*, through an addition that reactivates the temporal contexts. *El sopar*, in its relentless testimonial force, now enters into a dialogue with another presence, that of Puig Antich, who finally ends up taking part in it, like the *phantasmata* of the historical actors referred to by Warburg[38] when he spoke of the intermediate spaces between images in his exhibitions. Portabella has created this addendum not only as a parallel commentary, but as the incorporation of another filmic text of a similar nature to *El sopar*, to which it is related both in terms of the *mise-en-scène* and in the political dimension of its conception. With this incorporation, Portabella echoes a correspondence that had already been established in the public sphere, and thus reinforces the evolution of the film's critical reception and its diverse appropriations.

With this new polyphonic film, Portabella makes a gesture of unique cinematographic depth, with a dialectical power in the *Benjaminian* sense of the term: the images that illuminate the past are projected forward onto our present to reveal its archaeology. First the museums, then the institutions and finally the filmmaker himself have transformed the gaze on the past, projected onto the present through various processes of reactivation the film. But the particular force of this new film arises from the recognition of Portabella's artistry in proposing this dialectic of temporalities, thereby demonstrating the vital importance of the cinema in relation to other contemporary art forms. This highlights the central theory that underpins the idea of exhibition cinema and its character as a trigger for a diverse range of actions and historical forms – like, for example, the exhibition *The Complete Letters. Filmed Correspondence* (2011-2012),[39] curated by Jordi Balló and Alain Bergala, that transformed the perception of the possibilities of the relationship between filmmakers and the museum by creating the idea of a perpetual re-reading of the filmed letters in the context of the museum display. Sedimentation and addendum are, thus, not just two key concepts in the development of *El Sopar*, but also the threshold to a new field of possibilities for exhibition cinema.

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Illustrations

157. *El sopar* (Pere Portabella, 1974).
158. *El sopar* (Pere Portabella, 1974).
159. *El sopar* (Pere Portabella, 1974).
160. *El sopar* (Pere Portabella, 1974).
161. *El sopar* (Pere Portabella, 1974).

Notes

[1] Gilles Lipovetsky, Jean Serroy, *L'Écran global*, Seuil, Paris 2007.

[2] Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency*, *the Archive*, Harvard University Press, Cambridge (MA) 2002.

[3] Laura Mulvey, *Death 24x a Second: Stillness and the Moving Image*, Reaktion Books, London 2006.

[4] Gene Youngblood, *Expanded Cinema*, Dutton, New York 1969.

[5] Jordi Balló, Ivan Pintor, "Exhibition Cinema: A Crossroads between the Cinema and the Museum in Contemporary Spanish Film-Making," in *Hispanic Research Journal*, vol. 15, no. 1, 2014, pp. 33-48.

[6] Dominique Païni, *Le Temps exposé. Le cinéma de la salle au musée*, Éditions Cahiers du Cinéma, Paris 2002.

[7] Ivan Pintor, *Formas del Atlas y el Ensayo Visual a Partir de Aby Warburg: el Montaje, la Emoción y el Gesto*. *Barcelona, Research, Art, Creation*, vol. 5, no. 2, 2017, pp. 156-188; Ivan Pintor, "Silence and Fog: On Gesture, Time, and Historicity in the Films of Aleksandr Sokurov," in Ana Hedberg Olenina, Irina Schulzki (eds.), *Mise en geste: Studies of Gesture in Cinema and Art*, *Apparatus: Film, Media and Digital Cultures in Central and Eastern Europe*, no. 5, 2017, http://dx.doi.org/10.17892/app.2016.0005.60, last visit 24 April 2017.

[8] Aby Warburg, *Images from the region of the Pueblo Indians of North America*, translated by Michael P. Steinberg, Ithaca-New York 1995; Aby Warburg, "Sandro Botticelli's Birth of Venus and Spring. An Examination of Concepts of Antiquity in the Italian Early Renaissance," in *The Renewal of pagan antiquity: Contributions to the cultural history of the European Renaissance*, trans. by David Britt, Los Angeles 1999; Victoria Cirlot, "*Zwischenraum/Denkraum*: oscilaciones terminológicas en las Introducciones al Atlas de Aby Warburg (1929) y Ernst Gombrich (1937)," in *Engramma. La tradizione classica nella memoria occidentale*, no. 150, October 2017.

[9] Manuel Garin, Alan Salvadó, "Simultaneous Property and Experimental Piracy in Pere Portabella's 'Vampir Cuadecuc,'" in Alberto Beltrame, Ludovica Fales, Giuseppe Fidotta (eds.), *Whose Rights? Media, Intellectual Property and Authorship in the Digital Era*, Forum, Udine 2014, pp. 75-85; Ruben Hernández, *Pere Portabella, hacia una política del relato cinematográfico*, Errata Naturae, Madrid 2008, pp. 45-46.

[10] About political reactivation of previous and found footage, see: William C. Wees, *Recycled images*, 1993.

[11] Jordi Balló, Alan Salvadó, "'El sopar' y la sombra de Puig Antich," in *La Maleta de Portbou*, no. 27, 2018, pp. 83-91.

[12] Martí Rom, "Breve historia acerca del cine marginal (cines independientes, underground, militante, alternativo) en el contexto catalán," in *Cinema 2002*, no. 38, 1978, pp. 58-60.

[13] Joaquim Romaguera (ed.), *Catàleg de Films disponibles Parlats – Retolats en català*, Congrés de Cultura Catalana / Àmbit Cinema, Barcelona 1977, p. 217.

[14] Other documents include the dossier on Portabella by the Cine-Club de Ingenieros (1975) and the small collector's book *Portabella pres al camp de batalla* (1981). In the dossier, the film is mentioned briefly: "[...] And finally, in 1974: *El sopar*, a 1-hour conversational document about the different problems of 5 former political prisoners (4 men and 1 woman) due to generational differences and the years each one spent in prison"; in the collector's book is the comment: "the film yields the image and its multiplying power to five former political prisoners, who between them spent more than fifty years in prison, allowing them to reflect and offer a testimony charged with historicity."

[15] Tomás Delclòs, "Pere Portabella: marginació possibilista," in *Revista Canigó*, no. 411, 1975.

[16] Esteve Riambau, Interview: "Garay, Guerín, Jordà y Portabella," in *Nosferatu*, no. 9, 1992.

[17] The most illustrative case of this is perhaps the in-depth interview published in the weekly culture magazine *Presència* on February 11th, 1978, in which Pere Portabella is asked about prisons and prison conditions, in relation to a hunger strike called by two hundred prisoners in which the filmmaker himself took a mediating role in his capacity as a senator. However, in his response and reflection on this issue so closely linked to various points explored in *El sopar*, Portabella makes no mention at all of either the film or its tragic connection to Puig Antich.

[18] Pere Portabella, "Tres reflexions," in *Arc Voltaic*, nos. 9-10, 1981, p. 7.

[19] Miguel Antolín, *20 conversaciones Internacionales de Cine. Cine marginal en España*, 24ª Semana Internacional de Cine de Valladolid, 1979.

[20] Of the thirteen publications that we have analysed from this period that mention Pere Portabella, only five make even a token reference to *El sopar* and none mention the connection with Puig Antich. In chronological order, the publications are: *Pere Portabella, dossier Cine-Club Ingenieros* (1975); *Un cine para el cadalso. 40 años de censura cinematográfica en España* (1975); *Del azul al verde. El cine español durante el franquismo* (1976); *Catàleg de Films disponibles Parlats – Retolats en català. Congrés de Cultura Catalana* (1977); *Cine marginal en España* (1979); *Pere Portabella pres al camp de batalla* (1981); *Práctica fílmica y vanguardia artística en España 1925-1981* (1983); *El cine y la transición política española (1973-1983)* (1986); *Seixanta anys de Cinema Català (1930-1990)* (1990); *El cine en Cataluña. Una aproximación histórica* (1993); *Fora de camp. Set itineraris per l'audiovisual català dels anys 60 als 90* (1999); *Historia crítica del cine español. Desde 1897 hasta hoy* (1999); *La Escuela de Barcelona: el cine de la "gauche divine"* (1999).

[21] The fact that Portabella's revelation was new and, at the same time, unexpected, is confirmed by the fact that the book published as a catalogue for the MACBA retrospective, coordinated by Marcelo Expósito and written months before the opening of the exhibition, does not include any reference to the connection between *El sopar* and Puig Antich and even mentions the issue of the poor condition of the soundtrack as one of the hindrances to an in-depth analysis of the film.

[22] This was a documentary series with six episodes exploring different independent Catalan films produced in the 1960s and 1970s. *Crònica d'una mirada* (2003). Director: Manuel Barrios. Script: Manuel Barrios and Eva Martínez. Historical Consultants: Joaquim Romaguera and Llorenç Soler. Documentation: Montse Bailac.

[23] https://pragda.com/cronica/material/Cronica_Guidebook_Eng.pdf, last visit 24 April 2018.

[24] See: https://pragda.com/film/el-sopar/?festival=681, last visit 24 April 2018.

[25] See: http://www.cultures.toulouse.fr/documents/10180/5764769/programme_instituto_cervantes_sept_dec_2015, last visit 24 April 2017.

[26] See: http://www.milanofilmfestival.it/dettaglio_rassegna.php?rassegna_id=28, last visit 24 April 2017. Complemented by other synopses. Lisbon (2015): "Em 1974, no dia em que o anarquista Salvador Puig Antich é assassinado pelo poder franquista, Portabella reúne secretamente 5 ex-presos políticos para uma conversa sobre as suas experiências," http://doclisboa.org/2015/filmes/el-sopar/, last visit 24 April 2017; Rotterdam (2016): "Op de avond dat Salvador Puig Antich aan de wurgpaal sterft, komen vijf voormalige politieke gevangenen van verschillende partijen en allianties bijeen om voor deze clandestiene filmproductie hun ervaringen te bespreken," http://doclisboa.org/2015/filmes/el-sopar/, last visit 24 April 2017; San Sebastián (2016): "Cinco ex presos políticos se reúnen clandestinamente una tarde de 1974, en el mismo día en que Salvador Puig Antich es ejecutado," https://www.tabakalera.eu/es/el-sopar-pere-portabella, last visit 24 April 2017.

[27] Jonathan Rosenbaum, "El sopar," in *Chicago Reader*, 5 October 2007.

[28] José Sánchez Noriega, "Itinerarios para transitar por el cine de Portabella," in *Miró-Portabella. Poètica i transgressió*, Fundació Pilar i Joan Miró, Mallorca 2009.

[29] Erika Balsom, "Freedom of Association: The Cinema of Pere Portabella," in *ArtForum*, vol. 55, no. 1, 2016, pp. 342-350.

[30] Steven Marsh, "The Legacies of Pere Portabella: Between Heritage and Inheritance," in *Hispanic Review*, vol. 78, no. 4, Autumn 2010, pp. 556-557.

[31] Among the recent publications that highlight the link between *El sopar* and Puig Antich, we would also like to note the book *A Companion to Spanish Cinema* (2013), edited by Jo Labanyi and Tatjana Pavlović, and the doctoral thesis *Prácticas fílmicas de transgresión en el estado español (tardofranquismo y transición democráticas)* (2015) by Xosé Antonio Prieto Souto.

[32] https://cinepolitico.com/40-anos-no-es-nada-reflejos-y-derivas-del-cine-militante-espanol-contemporaneo/, last visit 24 April 2017.

[33] To explore this question further, see the letter published by Pere Portabella on the banning of his film and his presence in Granada: http://www.pereportabella.com/es/noticias/2015/03/la-diputacion-de-granada-veta-al-cineasta-pere-portabella, last visit 24 April 2017.

[34] http://www.lacomunapresxsdelfranquismo.org/2015/06/01/proyeccion-y-debate-40-anos-de-censura-franquista-40-postfranquista-homenaje-a-el-sopar/, last visit 24 April 2017.

[35] Xavier Antich, "'El sopar,' 1974," in *La Vanguardia*, 1 April 2015, p. 34.

[36] Ruben Hernández, *Pere Portabella, hacia una política del relato cinematográfico*, cit., p. 183.

[37] Other known footage shot during the Franco era includes the interview produced for Dutch television of two of Puig Antich's sisters, Imma and Carme, within hours of his execution. A short excerpt was included in the program "Dotze hores de vida. L'execució de Puig Antich i Heinz Chez" (2004) in the series *Dies de Transició*. Director: Francesc Escribano. In the case of Oriol Arau, only one filmed interview existed until now, produced for the report on the television program *30 minuts*: *Puig Antich: les últimes hores* (1989). Director: Francesc Escribano. Producers: Joan Úbeda and Joan González. Documentation: Mercè Bofill.

[38] Giorgio Agamben, *Ninfas*, Pre-Textos, Valencia 2010, p. 53.

[39] With filmed correspondences between Víctor Erice and Abbas Kiarostami, José Luis Guerín and Jonas Mekas, Albert Serra and Lisandro Alonso, Jaime Rosales and Wang Bing, Isaki Lacuesta and Naomi Kawase, Fernando Eimbcke and So Yong Kim, in the context of a collaboration between CCCB (Centre de Cultura Contemporània de Barcelona) Museum in Barcelona, Centre Pompidou and ACMI (Australian Centre for the Moving Image) in Melbourne.

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The Role of New Technology in the Marketing and Distribution of Independent Films: Producing a Virtual Reality Trailer for *Marie Curie: The Courage of Knowledge* (Marie Noelle, 2017)

This article considers the role of new technology in the marketing and distribution of independent films. I am a film distributor, as well as being a second year PhD student. My doctoral thesis is a response to the challenges facing independent distributors in the cinema marketplace in the UK. My objective here is to examine whether new technologies and marketing techniques (such as Virtual Reality and experiential cinema) can win audiences back to theatres, and in turn to enhance the experience of independent film, and that of cinema-goers themselves. To do so, a case study will be used of a film that my company, Swipe Films, released in cinemas last year called *Marie Curie: The Courage of Knowledge* (Marie Noelle, 2017). The marketing campaign for the film – in particular the Virtual Reality[1] trailer created – will first be looked at and then this paper will conclude with my observations from the whole experience.

The current UK independent cinema landscape

It is a challenging time in the UK, particularly for independent distributors that specialise in independent and foreign language films. Admissions and box office for such films in the UK has declined over the last 10 years. According to the BFI Statistical Yearbook,[2] 874 films were released into the UK market in 2017, an average of nearly 17 per week, generating total admissions of 170.6 million. Of that total, the top 50 generated more than three-quarters (76.6%) of the entire year's box office, leaving 824 independent films contributing to less than a quarter of the box office total. The Film Distributors Association chief executive Mark Batey (2018, p. 1) summarised it as the "high-risk, brutally unforgiving business of releasing films in the heavily supplied UK theatrical marketplace."

In addition to being a second-year practice based PhD student at Birmingham City University, I am also a practitioner, running the London based independent film production and distribution company, Swipe Films. It is important for my practice to be aware of new industry developments and to be reactive to changes in consumer behaviour and trends. We release on average four films across all media including cinemas each year, and the trough in cinema admissions and DVD sales directly and adversely affects my business – titles released range from feature documentaries such as *Acqua e Zucchero: The Carlo Di Palma Story* (Fariborz Kamkari, 2017) about the acclaimed Italian cinematographer and *Sette Giorni* (Rolando Colla, 2017), a love story set on a Sicilian Island, and a romantic comedy set in London and Paris, *Taking Stock* (Maeve Murphy, 2016*)*, starring Kelly Brook.

In September 2107, just as I was starting my PhD, I attended the Venice Film Festival, and was inspired by a new pioneering section called Venice VR. There were 22 Virtual Reality Feature films in competition, and the jury was presided over by Ricky Tognazzi and the iconic film director, John Landis, who has directed films such as *Blues Brothers* (1978), *An American Werewolf in London* (1981) and *Trading Places* (1983). There were 22 Virtual Reality Feature films in competition. The world of VR seemed exciting and innovative and I was keen to explore it further in my professional practice. It became apparent that virtual reality was a new technology being embraced by filmmakers, and being employed as a marketing tool that could be used to enhance the experience of cinemagoers. I was curious about how it might be employed as a marketing tool. So I was on the look out for the right film and the right marketing campaign to put it to the test.

The primary methodology for this and my doctoral research will be a practice led approach. Practice based research should allow me to create three artefacts – the first being the Virtual Reality trailer – over the course of my PhD studies. The second and third artefacts will evolve from the lessons learned and knowledge gleaned from the preceding artefact, through the methodology of the cyclical nature of interviews with peers, the use of artefact dissemination, and auto-ethnography.

Independent film distribution & technology

In current academic literature, there is a concern among exhibitors and distributors that Video on Demand (VOD) streaming companies – or "disruptive innovators"[3] as Crisp describes them – namely, Facebook, Netflix, Apple, Amazon and Google (the so called "FAANGs") are eroding the traditional cinemagoer's interest in movie-going. The influence of FAANGs is fundamentally changing the habits of consumers, causing them to be more home-bound – the concept of "connected viewing"[4] according to Holt & Sanson. It was against this backdrop that I began to investigate the implementation of and experimentation with new technological advances to examine if they can draw the coveted 15-35-year-old demographic to viewing independent and foreign language cinema releases.

The PWC Global Entertainment & Media Outlook Report (2017, p. 4) predicts that the UK's VR industry will grow at a faster rate than any other entertainment and media industry. It estimates that "the VR sector will be worth £801m in 2021, all of which is consumer spend. With over 16m VR headsets in the UK alone, innovative brands and content creators have a real opportunity to engage with consumers on a new level if they can enhance their experience." These statistics give me a platform to analyse what impact VR will have on the independent film distribution, and what role the "experiential" plays.

Academic work on independent film distribution is limited. As Knight & Thomas state "film distribution is still a woefully under-researched area."[5] Crisp goes further and points out "the small amount of literature on distribution tends to focus on the dominance of Hollywood and often ignores the role of 'independent' distribution companies."[6] Lobato (2012, p. 2) also believes that distributors "shape public culture by circulating or withholding texts which have the potential to become part of shared imaginaries, discourses and dreams." Many academic research textbooks, such as Geoff King's *Indiewood, USA*[7] pre-date the advancement in the sphere of the new technologies that is the focus of my research. More currently, Atkinson (2016) discusses current developments, and specifically how this period of analogue to digital transition impacted upon opportunities, cultures, working practices, and structures in the film industry, and addresses the various causative forces behind their resistances and adoptions. The current landscape of academic literature on independent distribution affords me an opportunity to develop it and move it forward in the realm of new technologies and experiential cinema.

Pardo (2015, p. 23) writes that from "its very inception the history of the movie industry has been closely linked to the history of technological development… As a consequence the ways of consuming movies are dramatically changing and the film industry is desperately trying to re-adapt itself to this new scenario." I plan to situate my research in the historical context of previous technological innovations in the film business and to explore if this current cycle of technological innovation is somewhat analogous to, for instance, the period of transition from silent movies to the "talkies" era in the 1920s, a time also described by Huhtamo as "the variations of moving image apparatuses and devices."[8] I intend to do this with particular reference to my experiential work on creating my first PhD artefact, the world's first Virtual Reality trailer for a foreign language film. But before analysing the impact of my trailer, it is important to put the creation of VR and, indeed the technology of Virtual Reality itself, into the "entangled historical" context of "the archaeology of technological novelties."[9]. Huhtamo states that "the advent of new media has challenged many scholars to investigate the media culture of late modernity."[10]

Gomery (2004) provides a study of the period of transition from the silent era to the "talkies" era and the economic and social factors that drove it. A historical analogy can be made between the current new technology and the then new technology of the "talkies" in the 1920s and 1930s. An initial review of this historical literature has led me to identify two crucial differences – the transition of sound was driven by the cinema-going audience demanding the exciting new technology of sound, and secondly, the economic benefits and increased profits that would accrue to the practitioners (namely the studios) from producing enough content to meet that demand. Conversely, Bordwell, Staiger and Thompson (1985) write about the process involved in the transition to talkies, but their theory is that it was driven by the demand for new and innovative ways to tell new stories. At the current stage of development in Virtual Reality, it can be argued that there are no immediate economic benefit or profits available to the practitioners financing/producing VR content. It is viewed by some industry experts as a non-profit making marketing tool for promoting completed artefacts of films.

Gomery refers often to the continuous investment by the studios (in the late 1920s and throughout the 1930s) into the development of sound to improve the customer experience. I have also examined academic discourse on film distribution and the development of VR as a marketing tool. The industry expert, Graham Breen, the EMEA project manager at HTC Vive, is of the opinion that VR offers an "amazing opportunity to build something that can completely change how people interact with their world" with the "only limiting factor being the imagination of those developing the virtual experiences."[11]

The current academic literature on the current state of VR in the film business is, in many cases, hampered by being out-dated. For instance, Bennett, Furstenau & MacKenzie[12] in their collection of essays endeavour to place changes in animation, film stock, the depiction of robots and the development of "synthespians," or neurological accounts of cinema audiences, within more broadly defined techno-cultural processes around cinema. 10 years on from its original publication, these arguments seem out-dated.

Going further back, the collection of essays in Hayward & Wollen,[13] covers the genesis of virtual reality and explores the popularisation of Virtual Reality. It feels antediluvian, being a quarter of century old. Similarly today the studios, particularly Google and Facebook, are investing to improve the technology to enhance the customer experience and widen the audience base. It is in this area of technological development and continuous innovation, that I would argue that the new cinema technologies do actually replicate the previous patterns of film production and exhibition, in particular the movement to the era of "talkies." Against that background, it seems appropriate to discuss the VR trailer we created for *Marie Curie*.

The Marie Curie *Virtual Reality trailer*

In February 2017, I attended the "world fair" of the Berlin Film Festival in my capacity as an independent film distributor, where I saw and acquired the rights to the transnational film, *Marie Curie: The Courage of Knowledge*. The film is a Polish/German/French co-production. As every science student knows, Marie Curie was a ground-breaking Polish scientist who won two Nobel Prizes, discovered radium and polonium and died tragically at the age of 56 from cancer. The film follows the scientist in the lab and in her personal life as she battles the male-dominated establishment, while dealing with the death of her husband, and embarking on an affair with a married colleague.

The film had not yet been released anywhere in the world. So we had to create a marketing campaign without the benefit of relying on marketing materials from other territories. In order to market the film as broadly as possible, as well as to attract a scientific minded audience for a film about the famous double Nobel Prize winning scientist, we created the world's first Virtual Reality trailer for a foreign language film. The process of creating this was to serve as my first artefact for my PhD. The marketing challenges were that the film was first of all in a foreign language (Polish and French) and secondly about a Polish scientist who died almost 100 years previously.

For the purposes of authenticity, the director cast a new Polish lead actress, Karolina Gruzska, the problem being she was completely unknown in the UK. Distributors are always looking at finding new ways to get a new audience or demographic to pay and see our films. I knew that the Marie Curie film would appeal to students who had an interest in science (physics and chemistry). From my past experience in releasing foreign language films in the UK, I knew it would be tough to get them to pay money to see a film that was not in English. Scientific minded people (particularly students in the elusive 15-25 age bracket) typically do not like to read subtitles.

We chose November 7th, 2017 as the release date of the film. This was deliberate, as it was the actual 150th anniversary of Marie Curie's birth, so it was an appropriate historic date. We spent about three months creating the VR trailer app. I created a focus group among the students at BCU and gave them the opportunity to view and review each cut of the VR trailer. Their feedback was instructive – their consensus was that viewing a VR trailer is not a social activity. In fact they found it to be an isolating experience. Even though the students were viewing the trailer in the company of their classmates, the experience was a solitary one. One of the reasons for this, I observed, was that the limitations of the technology and what can be achieved in camera.

James Cameron, director of such technologically innovative films as *Avatar* (2009), *Terminator 2* (1991) and *Aliens* (1986) observed as much when he stated: "Now what most people are calling VR right now isn't VR. It's really omnidirectional camera. And because you don't really have any spatial control – any spatial movement is baked in – you [only] have the ability to look around in an environment, and that's not true VR. [In] true VR, you can move around. And you have a lot of control over where you are spatially in the environment."[14]

In the development of the VR trailer, I was influenced by Cameron's observation, so I developed the trailer app further so that the final version transported viewers into the lab and lecture hall of Marie Curie. From watching the 22 features at the Venice Film Festival and developing the various cuts of the VR trailer, even though VR technology is still quite limited, I believed that if a physical component could be built into the VR, then it has a more visceral impact on the viewer. I had originally observed this from Alejandro Iñárritu's *Carne y Arena* (2017), which won a Special Oscar; the first time ever the Academy has recognised VR as an art form. This short was financed by the Prada Foundation and centres around a Mexican immigrant attempting to cross the border into the United States. The director made each viewer take off his shoes, so they could feel the desert sand of Texas under their feet, thus adding to the visceral impact of the film. I felt we could adapt this to suit our VR trailer app, but that we would still need to do something different to launch the marketing campaign for the VR elements of *Marie Curie: The Courage of Knowledge.*

We decided to launch the VR trailer at the premiere of the film, something that had never been done before. The Polish Ambassador, who wanted to honour the memory of the person who is regularly voted as the most respected Pole of all time, kindly agreed to host the premiere and party afterwards at the Polish Embassy in London. We turned one of the rooms into Marie Curie's laboratory. There were Bunsen burners, and beakers with chemicals of many different colours. On arrival at the "lab" the viewer had to put on and wear a white lab coat before putting on the VR headset. A scientist performed flamboyant experiments using liquid nitrogen and other dangerous chemicals. This was an appropriate environment to launch the VR trailer. For many, this was their first experience of VR. In the interest of peer review, I invited several practitioners, such as other film distributors, directors and publicists.

The trailer app was made globally available to download for free on Facebook's Oculus Store and Google Play Store.[15] To encourage people to download the trailer, we did a cross-promotional deal with our partner, the Science Museum in London. Everyone who downloaded the app had the chance to win two tickets to see the VR Space Descent with the British astronaut, Tim Peake. We had hundreds of entries to that competition. The Science Museum was thrilled that visitor numbers were up to the VR exhibit, thanks to the extra awareness the promotional partnership brought to the Science Museum. The film opened on Marie Curie's anniversary on November 7th. The film played in cinemas across the country for four months. So it has been a considerable success in the UK. The VR trailer was a potent marketing tool that was successful in bringing a scientific audience to an otherwise inaccessible foreign language film.

The feedback from my peers was instructive. For instance, one leading British film distributor described the experience: “Frank from Swipe Films showed me a virtual reality trailer he had commissioned to promote the film, which is without a doubt, the best trailer presentation I have ever seen. It is the way of the future. The only problem is that unless you have a VR headset and a laser pointer how are all of you going to see this wonderful innovation? But why let practicality get in the way of a revolutionary concept. The industry will adapt.” This comment is a perfect encapsulation of the problems that VR creators face in enabling widespread adoption by consumers, and in turn, the challenge that film distributors must confront if VR marketing techniques are to enter the mainstream.

The evolution of Virtual Reality in film marketing

So where does the *Marie Curie* VR trailer sit and at what stage is VR in its evolution in film distribution? Gomery (2004) was particularly insightful in identifying what he described as the “Theory of Technological Innovation” (2004, p. 24), and, more specifically, a three tiered approach – the first stage being the “development of the necessary inventions.” The “second and most crucial stage,” according to Gomery (2004 preface, p. xix,), is “innovation” itself. The third and final one being the “diffusion stage” which is concerned with the “learning about and deciding among various investment policies open” to the distributor… and it also can involve a “reallocation of resources on the part” of the distributor. At the current stage of development in Virtual Reality, it can be argued that there are no immediate economic benefit or profits available to the practitioners financing/producing VR content. It is viewed by some industry experts as a non-profit making marketing tool for promoting completed artefacts of films.

To date, only studio movies have added a VR component to their films. This is partly due to the high cost of creating VR. VR is used primarily to continue the relationship with the film fan and the universe of the film itself, as was the case with Warner Bros.’ *Ready Player One*’s (Steven Spielberg, 2017) VR campaign, where a behind the scenes world could be viewed for free in advance of the film’s release in cinemas, and Pixar’s Oscar winning animated film, *Coco* (Lee Unkrich, 2017), where the Coco VR World could be viewed for free in many Disney Stores around the world.

Secondly, it could be argued that there is an evolving, but not yet an insatiable demand, from cinemagoers for new VR content. Gomery refers often to the continuous investment by the studios (in the late 1920s and throughout the 1930s) into the development of sound to improve the customer experience. The industry expert, Graham Breen, the EMEA project manager at HTC Vive, is of the opinion that VR offers an “amazing opportunity to build something that can completely change how people interact with their world” with the “only limiting factor being the imagination of those developing the virtual experiences.”[16]

With *Ready Player One*, predominantly set in the VR world of the Oasis and based on the cult millennial book of the same name, Warner Bros. deliberately pursued an immersive marketing campaign that complemented the storyline of the film. It became a global success, grossing over $580m worldwide. Given its success, Warner Bros. intends it to be a valuable new film franchise. Condis observes that “gamers are often observes as media-savvy tastemakers, early adopters who can be studied by corporations looking to study which franchises will become mainstream hits.”[17] Condis’ thesis is that *Ready Player One* “illustrates the anxieties and uncertainties of embodiment and identity in the digital age by constructing a pop culture ‘canon’ of texts that all participants in video game culture must know.”[18]

Using Gomery’s three part process, it can be argued that the VR world is in the second stage of technological innovation, but about to enter the final diffusion stage. While the current works are mainly not being made for profit, it can be argued that it is still in an experimental (or “innovative” stage as Gomery described it) where the products created are mainly for marketing purposes and to get the user (and this generation of cinema-goers) accustomed to the new world of VR with all its current limitations.

The film business is, like it name suggests, *a business*. But, in my view, the era of VR being deployed as only a useful marketing device will soon be ending. The next stage has already begun. For instance in the UK, Disney and Lucasfilm offered consumers a VR experience called *Star Wars: Secrets of the Empire*, which was set in the busiest shopping centre in London – the Westfield in Shepherd's Bush. It was a fully immersive adventure. It cost a staggering £32.50 (38 euros) for a 15 minute experience. IMAX has teamed with cinema chain Odeon to launch Europe's first virtual reality entertainment centre. The two companies launched the IMAX VR Experience Centre in Manchester, England and charge £10 (12 euros) for a 12 minute Justice League themed "thrilling cinematic Virtual Reality Experience that allows the viewer to step into the shoes and master the powers of the iconic DC Super Heroes: Batman, Superman and Aquaman."

So I would maintain that we are already entering the third stage of technological innovation where distributors are, in the words of Gomery, "deciding among various investment policies" which involves a "reallocation of resources" on their part, to create "*for profit*" new VR product where consumers are charged entry for the experience. It is my contention that it will continue to be mainly Hollywood studios that create VR content for their major cinemas releases. For most independent distributors the cost of creating VR content is simply too high to justify the limited return on investment.

The experiential cinema movement

Experiential or Immersive cinema takes the cinematic experience to another level, and integrates sources of entertainment that go beyond simple movie projection. Cooper-Martin defines "experiential" in the context of cinema as being that "which consumers choose, buy and use solely to experience and enjoy,"[19] movies being an example of this. Hosting social events and adopting virtual reality experiences, cinema owners and event cinema organisers (like Secret Cinema), aim to not only add a sense of novelty, but also to transform the traditional movie-going experience from simply being passive, to something more engaging, or "immersive."

Secret Cinema is a phenomenon in the UK and the world leader in delivering an experience for participants, where the world of a cult film, such as *The Empire Strikes Back* (Irven Kershner, 1980), *Moulin Rouge* (Baz Luhrmann, 2001), *Back to the Future* (Robert Zemeckis, 1985) and, most recently, *Romeo and Juliet* (Baz Luhrmann, 1996) and *Blade Runner* (Ridley Scott, 1982) is lavishly recreated and brought to life. While the film itself is shown at the event, it is almost incidental to the communal experience of reliving the film, the characters and the immersive world with a group of friends. Secret Cinema teams with the original studio behind each movie – Fox, LucasFilm, Universal & Warner Bros. – in a revenue sharing model. Secret Cinema's screenings are part of the sector of theatrical distribution known as "event cinema," and more often described as "experiential."

Atkinson (2016) explores this idea, and considers how this period of analogue to digital transition has impacted upon opportunities, cultures, working practices, cultures, and structures in the film industry, and addresses the various causative forces behind their resistances and adoptions. Atkinson explores this in greater depth in her 2017 collection of compilation essays, co-edited with Helen Kennedy, entitled *Live Cinema: Cultures, Economies and Aesthethics.* The preface outlines that they "adopted the catch all title 'Live Cinema' from the Secret Cinema Back to the Future Advertising - The Live Cinema Experience as an umbrella term through which to capture the broad range of emergent creative art practices and novel commercial strategies"[20] that they were identifying.

Implementation of VR and experential events in UK distribution

From my experience in creating a trailer app for *Marie Curie*, I have the following thoughts as to where Virtual Reality sits in the current marketplace. I think it is part of a much bigger movement, that of the domain of "Live Cinema," as Atkinson and Wallace generically described it. In my view, for content creators, the term

"Experential Cinema," is a more appropriate term. Experential Cinema certainly encompasses a *live* element, but the *experience* itself is a far more marketable commodity than just the "*liveness*" aspect. In my case study, by showcasing the *Marie Curie* VR trailer in the real world physical environment of Marie Curie's lab and having spectacular chemistry experiments happening simultaneously, we strived to create an experential adventure for the viewer, that can not be reproduced at home. I have learned, through an examination of box office statistics, audience feedback and peer review, that experential marketing techniques (such as the creation of a VR trailer), has an important role to play in the viability of foreign language releases in the UK. I have also learned that giving the audience a choice of how to experience a film is an important aspect in the presentation of it to the important 15 to 35 year old demographic.

This is further evidenced by Secret Cinema holding, what I would describe, as "participatory" preview screenings in London of the South Korean film, *The Handmaiden* (Park Chan-Wook, 2016), charging £30 a ticket, and selling 5500 tickets across six screenings. In keeping with the spirit of the film, the audience came dressed in black tie and evening gowns and were not allowed to speak, with communication being done through writing notes on pads. Those screenings alone contributed to almost a third of the total box office of the film in the UK.

Last year, over the course of seventeen weeks in a single east London venue, the immersive Secret Cinema screenings of *Moulin Rouge* grossed almost £5m, at an average ticket cost of £50, more than 4.5 times the cost of the cinema ticket in the UK (£7.70). While VR can be viewed cheaply at home with just google cardboard and a smartphone, there is no revenue benefit for the creator, so studios and distributors are beginning to position VR as a premium product that has the potential to lure the cash-rich 15-25 year old demographic out of home to the multiplex or mall. The USP is that it can provide state of the art immersive content where Giuseppe from Gorizia or Larry from London can *experience* or become Jeeg Robot, Batman or Superman.

Both the consumer feedback from my focus group of students at BCU during the development of the VR trailer and the peer review of the completed version was important in forming my thinking as to how best to harness the power of VR in the distribution of independent films. One of the main reasons that independent film audiences go to the cinema is to be immersed into the world of a film. It is an escapist form of entertainment. So far in its nascent development, VR has been used as a marketing tool to build awareness of a film among its target demographic. As the success of Secret Cinema has demonstrated in the UK, audience participation is a key component of its success, and the sense of immersion is fundamental to that. VR has the power to enhance that experience by transporting the viewer into the world of the film, but the limitations of the technology currently count against it.

"Trailing the trailer" has been a concept in studio marketing since 2014 when Universal enlisted Beyonce to tweet a teaser trailer for *Fifty Shades of Grey* (Sam Taylor-Wood, 2014) (which featured a new version of her song, *Crazy in Love*) and the trailer ended up having a record 100 million views in its first week of launch. I adapted this for *Marie Curie* by trailing the trailer at the premiere of the film. This "trailing the trailer" had not been done before in the VR world, so is a new concept in VR film marketing. In the case of *Marie Curie*, this was such a success, particularly for positive word of mouth that it could be adopted for other campaigns. I believe that other film distributors could successfully adapt this for their VR campaigns. In independent film distribution, promotion is vital, but as the launch of the *Marie Curie* VR trailer reveals, the actual film promotion itself can be promoted so as to lead to more independent cinema programmers, and ultimately more cinema-goers being motivated to see the film. In the opening week of release of the film, we conducted an exit poll at the Ciné Lumière cinema in South Kensington – that poll showed that the VR trailer encouraged a scientific minded segment of the audience to purchase a ticket for a foreign language film, something that they had done in the previous eighteen months.

The second key point, is that the way that independent film distribution is being distributed is changing. Secret Cinema has clearly demonstrated that there is an appetite among independent cinema-goers for the viewing of films in non-traditional venues. Warehouses, car parks, and derelict building sites have all been successfully used by Secret Cinema. There are popular open-air screenings such as the Film4 season of films in Somerset House in London, Luna Cinema's screenings in the Pavilion of Kensington Palace, the Rooftop

Film Club where viewers sit in Directors' Chairs at the Queen of Hoxton pub in London. These all show that independent film audiences in the UK are happy to embrace new forms of locations, as long as the distributor can market it as an "event," or an immersive experience in keeping with the spirit of the movie. To date, these non-traditional screenings have mainly been of classic films, but as the success of the *Marie Curie* film has shown, there is an opportunity for UK distributors to seek out non-traditional venues for their slate of films, so that independent audiences can "experience" those films.

What I have learned from my research is that if independent distributors can create innovative and disruptive VR content and/or build in a unique experential factor into their marketing, then there is the potential that audiences will be more frequent visitors to the cinema or the mall. I believe that the prediction of the authors of the PWC Report that there will be 21m VR headsets in the UK in 2021 is ambitious. Independent distributors could benefit from doing more research into the impact of "participatory" screenings on foreign language releases, and analysing the factors that make them a success. That will be the focus of the next phase of my research.

For my next project I am distributing *Wine Calling* (Bruno Sauvard, 2018), a feature documentary about natural wine makers. I am developing an immersive and experiential marketing campaign for that film, which I hope will lead to the second artefact that I will create for my PhD thesis. The initial release plan for that film is to create a series of special preview screenings where natural wine producers, merchants and supermarkets such as Whole Foods and Sainsburys host free wine tastings (most likely in non-traditional cinema venues) to cross-promote the film and their natural wine range.

On March 28th, 2018, the UK Government unveiled its £150m Industrial Strategy Fund designed to support the creative industries. £33m was allocated for immersive technology products, experiences and services including new uses of virtual and augmented reality. This Fund could provide me with opportunities to create artefacts for my practice and/or to analyse the work created by other distributors in this new technological domain. I am also exploring ways to build a Virtual Reality component into *Wine Calling*'s campaign, and I will be applying to the Fund to do so. In this way, I hope that cinema-goers will be truly immersed in the world of the film and will be able to experience the film in a unique way by physically sampling the wines appearing in the film, meeting the wine producers in person, as well as being virtually transported to the vineyards where the wine was produced in a VR trailer. What I learned from the *Marie Curie* VR trailer, is that immersion is a key factor among independent filmgoers, so I am hoping that a VR trailer will enhance the experience for the viewer and help build much needed word of mouth for the film across social media. Therefore, this second artefact will be developed with the knowledge gained from my findings from the creation of my first artefact and will incorporate both an immersive physical experience element and VR elements.

More globally, I believe that UK distributors should avail of the UK Government's £33m portion of the Industrial Strategy Fund that has been allocated for immersive technology products to experiment and create VR marketing materials, including trailers. The Fund provides a great opportunity for all UK distributors and producers to create products that can be used to immerse independent audiences into the world of their films. £33m is a significant resource to be able to call upon, and content creators should use this funding opportunity to conduct market research to figure out what does and does not work for independent cinema-goers. I will certainly be applying to the Fund for two reasons – to develop my understanding of what works best to immerse audiences, as well as to develop the academic literature by writing about my findings from my practice based research in this field. It is my contention that while the success and development of independent cinema, VR cinema at large and VR as a marketing tool are inextricably linked, more research needs to be done in this area, and as importantly, more VR products need to be created to deepen the understanding of their impact on audiences. That way, as a practice based academic I can observe their impact and develop the literature on the subject.

One of the challenges I and other content creators and marketers face is the relentless force of change in the entertainment business. The business is changing rapidly, as is the format of how the viewer consumes entertainment content. The world of immersive entertainment is rapidly evolving and changing, as is the political economy surrounding it. The "curse of the now" looms large over my academic career, my research and my professional practice. Is VR a fad or will it evolve from being a niche interest into becoming a legitimate and profitable medium? There is a danger that my academic research in this field (as well as my professional practice) could become out-dated by changing consumer habits and evolving technologies.

I believe that my professional academic development will benefit from my engagement with the entertainment industry in my capacity as a practitioner. My work as a distributor will allow me to continue to craft marketing campaigns that have an immersive or experiential element to it. My work as a producer will allow me to be a content creator.

What is clear from my research so far is that premium content will allow content creators, and distributors to monetise this new media, or as Huhtamo describes it, to produce "the mappings of the new empire of network economies."[21] If not, in my view, there is a danger that VR, in particular, could be in danger of going the way of such past technical cinematic innovations as Smell-O-Vision and Silent Movies.[22]

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Notes

[1] Virtual Reality (VR) is a computer-generated and artificial recreation of a virtual or real world that immerses users by making them experience this reality first hand. Currently, it involves wearing a VR head-set, and the user is able to look around and interact with elements in this artificial world.

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[22] This paper was originally delivered in the scenic medieval town of Gorizia. It is said to have been founded by Julius Caesar in 50BC, the great Roman Emperor who famously said "Veni Vidi Vici." To paraphrase him, VR has come, it has been seen, but it has not yet conquered… Veni. Vidi. Sed Non Vici.

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